

# **APPENDIX A**

## **Superior Court Statement of Decision**

FILED

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K. BIEKEN CLERK OF THE COURT  
SUPERIOR COURT OF CALIFORNIA  
COUNTY OF CONTRA COSTA

By C. Norfang, Deputy Clerk

SUPERIOR COURT OF THE STATE OF CALIFORNIA

IN AND FOR THE COUNTY OF CONTRA COSTA

COMMUNITIES FOR A BETTER  
ENVIRONMENT and CENTER FOR  
BIOLOGICAL DIVERSITY,

Petitioners,

v.

COUNTY OF CONTRA COSTA; BOARD OF  
SUPERVISORS OF COUNTY OF CONTRA  
COSTA; CONTRA COSTA COUNTY  
DEPARTMENT OF CONSERVATION AND  
DEVELOPMENT and DOES 1 - 20,

Respondents,

PHILLIPS 66, a Texas Corporation, and DOES  
21 - 40, inclusive,

Real Party in Interest.

Case No. N22-1080

**STATEMENT OF DECISION FROM  
7/12/23 SUBMISSION**

Judge: Hon. Edward G. Weil  
Dept. 1/39

The Court heard oral argument in this case on June 28, 2023, and advised the parties that the Court would determine whether further briefing was necessary no later than July 12, 2023. On that date, the Court advised the parties that no further briefing was necessary and the matter was

1 deemed submitted as of that date. After considering all documents filed in this case, along with oral  
2 argument, the Court rules as follows:<sup>1</sup>

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4 I. BACKGROUND

5 The Rodeo Refinery has operated in Rodeo for 125 years, most recently by Real Party in  
6 Interest Phillips 66 Company. In August of 2020, Phillips applied to change the facility to make  
7 fuel products from renewable fuels, i.e., agricultural feedstocks such as soybean oil, corn oil, and  
8 other vegetable oils. Respondents Contra Costa County, its Board of Supervisors and its  
9 Department of Conservation and Development prepared an Environmental Impact Report pursuant  
10 to CEQA. Petitioners Communities for a Better Environment and Center for Biological Diversity  
11 contend that the EIR did not comply with CEQA for a variety of reasons.  
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13 First, Petitioners contend that the EIR unlawfully “piecemealed” the project, by excluding  
14 the First Phase of the refinery modification into a separate project, which did not undergo  
15 environmental review. Second, they contend that the EIR did not disclose the “feedstock mix” that  
16 will be used at the refinery. Third, they contend that the EIR failed to consider “Indirect Land Use  
17 Changes” (ILUC) caused by the project. Fourth, they contend that the EIR does not address  
18 cumulative impacts. Fifth, they claim the County improperly deferred determining how to mitigate  
19 odor impacts.  
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24 <sup>1</sup> Although the Court titles this order “Statement of Decision,” it did not follow the process of  
25 issuing a tentative decision and proposed statement of decision under Rule of Court 3.1590,  
26 because the requirements of Code of Civil Procedure section 632 do not apply to this action. That  
27 provision applies where the court holds a trial resolving issues of fact, which does not occur in a  
28 mandamus action under CEQA. (*City of Carmel-by-the-Sea v. Board of Supervisors* (1986) 183  
Cal.App.3d 229, 237.)

1           II.       STANDARD OF REVIEW

2           In reviewing a challenge to approval of a project under CEQA, the Court determines  
3 whether there has been a prejudicial abuse of discretion by the public agency, which is established  
4 " 'if the agency has not proceeded in a manner required by law or if the determination or decision is  
5 not supported by substantial evidence.' [Citations, internal quotation marks omitted.]" (*Citizens*  
6 *Committee to Complete the Refuge v. City of Newark* (2021) 74 Cal.App.5th 460, 469 ("City of  
7 *Newark*") [quoting *Concerned Dublin Citizens v. City of Dublin* (2013) 214 Cal.App.4th 1301,  
8 1310].)

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10           Under the substantial evidence test, the agency's factual determinations cannot be set aside  
11 "on the ground that an opposite conclusion would have been equally or more reasonable." (*Sierra*  
12 *Club v. County of Fresno* (2018) 6 Cal.5th 502, 512 [internal quotation marks omitted, quoting  
13 *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th  
14 412, 435 and addressing factual findings supporting an EIR].) " 'Substantial evidence' is defined as  
15 'enough relevant information and reasonable inferences from this information that a fair argument  
16 can be made to support a conclusion, even though other conclusions might also be reached.'  
17 (CEQA guidelines, § 15384, subd. (a).) 'The agency is the finder of fact and we must indulge all  
18 reasonable inferences from the evidence that would support the agency's determinations and  
19 resolve all conflicts in the evidence in favor of the agency's decision.' [Citation omitted.]" (*City of*  
20 *Hayward v. Trustees of California State University* (2015) 242 Cal.App.4th 833, 839-840 [quoting  
21 *Save Our Peninsula Committee v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99,  
22 117].) (See also *BreakZone Billiards v. City of Torrance* (2000) 81 Cal.App.4th 1205, 1244  
23 ["reasonable doubts must be resolved in favor of the decision of the agency."].)



1 Substantial evidence includes "facts, reasonable assumptions predicated upon facts, and  
2 expert opinion supported by facts." (Pub. Res. Code § 21082.2(c).) "Argument, speculation,  
3 unsubstantiated opinion or narrative" do not qualify as substantial evidence. (Guidelines §  
4 15384(a); Pub. Res. Code § 21082.2(c).)  
5

6 The burden is on Petitioners to demonstrate that no substantial evidence in the record  
7 supports Respondents' decisions. (*Citizens for a Megaplex-Free Alameda v. City of Alameda*  
8 (2007) 149 Cal.App.4th 91, 113 ["It is *Citizens'* burden to demonstrate that there is not sufficient  
9 evidence in the record to justify the City's action. [Citation omitted; italics in original.] To do so, an  
10 appellant must set forth in its brief all the material evidence on the point, not merely its own  
11 evidence. [Citation omitted.] A failure to do so is deemed a concession that the evidence supports  
12 the findings. [Citation omitted.]"]; *Citizens Against Airport Pollution v. City of San Jose, supra*,  
13 227 Cal.App.4th at 798 ["The burden is on the appellant to show there is no substantial evidence  
14 to support the findings of the agency. [Citation.] [Citation omitted.]," quoting *American Canyon*  
15 *Community United for Responsible Growth v. City of American Canyon* (2006) 145 Cal.App.4th  
16 1062, 1070].)  
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### 19 III. ANALYSIS

#### 20 A. Piecemealing

21 What Petitioners call the first phase of the project (and which Respondents call the "Unit  
22 250 Renewable Diesel Project") consisted of converting a diesel hydrotreater (Unit 250) to process  
23 renewable feedstocks instead of petroleum. This included adding 2,300 feet of pipeline. What  
24 petitioners call the second phase is the Rodeo Renewed Project, which converts the entire refinery  
25 from processing petroleum to processing renewable feedstocks. It modified the "hydrotreater,"  
26 rebuilt pumps and other equipment to treat renewable feedstocks. Unit 250's capacity represents  
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1 18% of the Rodeo Renewed Project's total. Initially Phillips sought building permits for parts of  
2 the project, but sought none for other activities, which led to the Bay Area Air Quality  
3 Management District citing Phillips for failing to have required permits. By this time, however, the  
4 "first phase" of the project was already operating.  
5

6 In August of 2020, Phillips applied to the County for approval of the "Second Phase" of the  
7 project, the "Rodeo Renewed Project." This phase significantly expanded the ability to process  
8 renewable feedstocks, and expand the variety of feedstocks used from soybean oil to include used  
9 cooking oil, fats, oil and greases; tallow; and inedible corn oil. The combined effect would make  
10 the Rodeo Refinery the largest refiner of renewable feedstocks in the world.  
11

12 The definition of the "project" is a key part of CEQA. (*Stopthemillenniumhollywood.com*  
13 *v. City of Los Angeles* (2019) 39 Cal.App.5th 1, 16.) Piecemealing or segmenting one project into  
14 separate pieces is prohibited because it "avoids the responsibility of considering the environmental  
15 impacts of the project as a whole." (*Orinda Ass'n v. Bd. Of Supervisors* (1985) 182 Cal.App.3d  
16 1145, 1156, 1171.) This assures that " 'environmental considerations do not become submerged  
17 by chopping a large project into many little ones – each with a minimal potential impact on the  
18 environment – which cumulatively may have disastrous consequences.' [Citation.]" (*Laurel*  
19 *Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 396.) A  
20 "project" is defined broadly to ensure that "CEQA's requirements are not avoided by chopping a  
21 proposed activity into bite-sized pieces which, when taken individually, may have no significant  
22 adverse effect on the environment. [Citation.]" (*POET, LLC v. State Air Resources Bd.* (2017) 12  
23 Cal.App.5th 52, 73.)  
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26 The county contended in response to comments on the Draft EIR that the projects were  
27 independent projects. The county said at AR 000931, AR 002302 that Unit 250 was not  
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1 “operationally related” to the Rodeo Renewed Project. But it also stated that “from time to time,  
2 treated renewable feedstocks from the proposed PTU [Feed Pre-treatment Unit] may be used as an  
3 alternative source of feedstock for Unit 250.” (AR 2303.) In addition, naphtha produced by Unit  
4 250 will be fed to other referring units converted under the Rodeo Renewed Project for further  
5 processing. (AR 053737.) Both are located within the existing boundaries of the refinery.  
6

7 In *Tuolumne County. Citizens for Responsible Growth, Inc. v. City of Sonora* (2007) 155  
8 Cal.App.4th 1214, the issue was whether a road realignment was separate from the development of  
9 a home improvement center because they could be implemented independently of each other.”  
10 (155 Cal.App.4th at 1229.) The court found that “theoretical independence does not defeat a  
11 piecemealing claim, what matters is “what is actually happening.” (*Id.*, at 1230; See also *Banning*  
12 *Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1223, n. 7 [when  
13 “implementation would be sufficiently interdependent in practice even if theoretically separable ...  
14 a piecemealing challenge would be well founded.”].) The Court provided different ways of looking  
15 at whether two projects were sufficiently related such that they should be considered together for  
16 CEQA purposes. The court explained that “[o]ne way is to examine how closely related the acts are  
17 to the overall objective of the project. The relationship between the particular act and the remainder  
18 of the project is sufficiently close when the proposed physical act is among the ‘various steps  
19 which taken together obtain an objective.’ [Citation.]” (*Id.* at 1226.) The court also considered  
20 whether the two projects were “related in (1) time, (2) physical location and (3) the entity  
21 undertaking the action.” (*Id.* at 1227; see also *POET, LLC, supra*, 12 Cal.App.5th at 74-75.)  
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24 In *Tuolumne County* the road alignment was a condition of the approval of the construction  
25 of the home improvement center. The County contended, however, that the road realignment had  
26 been contemplated for years, and was needed due to regional traffic concerns, not just the home  
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28

1 improvement center. The court stated, however, that “[w]e reject the position that a CEQA project  
2 excludes an activity *that actually will be undertaken* if the need for that activity was not fully  
3 attributable to the project as originally proposed.” (*Tuolumne County, supra*, 155 Cal.App.4th., at  
4 1228 [emphasis in original].) “The idea that all integral activities are part of the same CEQA  
5 project does not establish that *only* integral activities are part of the same CEQA project.” (*Id.*, at  
6 1229 [emphasis in original].) The court also relied heavily on the fact that the road alignment was  
7 made a condition of approval of the home improvement center: “At that point in time, the  
8 independent existence of the two actions ceased for purposes of CEQA[.]” (*Id.*, at 1231.)

10 In *Orinda Ass’n*, the project consisted of a retail and office development, but the project  
11 required the demolition of a theatre and bank building, which was not included as part of the  
12 project in the CEQA analysis. (*Orinda Ass’n, supra*, 182 Cal.App.3d at 1170.) The demolition  
13 clearly was part of the project. (*Id.*, at 1171.) *Orinda Ass’n* is a relatively clear case—the  
14 remaining part of the project could not be implemented without demolition of the theatre and bank.  
15 And there was no reason to demolish the theatre and bank other than to allow the other part of the  
16 project to proceed.

18 Other cases take the same approach. *County of Ventura v. City of Moorpark* (2018) 24  
19 Cal.App.5th 377, at 285, cites *Tuolumne*: “It is only ‘where the second activity is independent of,  
20 and not a contemplated future part of, the first activity, [that] the two activities may be reviewed  
21 separately.’” In that case, the court found that a beach restoration project involving adding sand to  
22 a beach could not be separated from the City’s approval of permits to allow trucks to haul sand  
23 from a quarry to the beach. The court also cited to *Muzzy Ranch Co. v. Solano County Airport*  
24 *Land Use Com.* (2007) 41 Cal.4th 372, 382 for point that it is a question of independent review.



1 “Whether an activity is a project is an issue of law that can be decided on undisputed data in the  
2 record on appeal.”

3  
4 *Make UC A Good Neighbor v. Regents of University of California* (2023) 88 Cal.App.5th  
5 656 explained that “[t]he projects must be linked in a way that logically makes them one project,  
6 not two. A classic example is *Laurel Heights*, where a university described the project only as its  
7 initial plan to occupy part of a building, omitting its future plan to occupy the entire building.  
8 (*Laurel Heights, supra*, 47 Cal.3d at p. 396.) ... But two projects may be kept separate when,  
9 although the projects are related in some ways, they serve different purposes or can be  
10 implemented independently. (See *Banning Ranch, supra*, 211 Cal.App.4th at pp. 1223–1224  
11 [summarizing the case law].” (*Make UC A Good Neighbor, supra*, 88 Cal.App.5th at 683-684.)  
12

13 In essence, the result of the case law is that the two phases are one project if they are  
14 interdependent in the sense that one would not be done without the other or if they serve different  
15 purposes. Would the Unit 250 project be built without the subsequent Rodeo Renewed Project?  
16 Would the Rodeo Renewed Project be built without the Unit 250 project? The issue is not whether  
17 they could have, but whether they would have. The Court is also concerned with whether the two  
18 projects serve the same purposes.  
19

20 Respondents argue that Petitioners failed to exhaust their remedies by raising their concerns  
21 about Unit 250 when approvals for that project were being considered. Respondents also argue that  
22 the statute of limitations for challenging Unit 250’s approval has long expired. These arguments  
23 assume that Petitioners are challenging Unit 250 directly. Rather, Petitioners are challenging the  
24 approval of this Project and the failure to fully consider Unit 250 in the context of this Project.  
25 Thus, the Court’s consideration here is whether Petitioners raised their concerns regarding Unit 250  
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1 in the context of the environmental review for this Project. The Court finds that Petitioners  
2 sufficiently raised the issue. (AR 2302-04.)

3  
4 Unit 250 switched from processing petroleum feedstocks to renewable feedstocks in April  
5 2021. (AR 2302.) Phillips 66 obtained various permits from the County related to the changes to  
6 Unit 250 in December 2020. (Respondents' RJN C, D and E.) Apparently Phillips 66 did not obtain  
7 the necessary permits from the Air District and received a notice of violation in April 2022.  
8 (Petitioners' RJN B.)

9  
10 In August 2020, Phillips 66 started the Rodeo Renewed Project by applying to the County.  
11 A Draft EIR was completed in October 2021 and a Final EIR was completed in March 2022 and  
12 was certified in May 2022. (AR 1, 806-09, 2230, 53631.)

13  
14 Most of the changes to Unit 250 itself appear to be separate from the Rodeo Renewed  
15 Project. However, part of the changes to Unit 250 included changes that support the Project. The  
16 Court is particularly concerned with changes to the NuStar rail terminal and the 2,300 feet of  
17 pipeline running from the terminal to the Rodeo facility.

18  
19 In conjunction with the changes to Unit 250, the NuStar terminal requested changes. (AR  
20 103086-87; 103096.) The changes to the NuStar facility would allow it to receive soybean oil and  
21 other renewable feedstocks. (AR 103086.) While the capacity at NuStar would not change, NuStar  
22 sought the ability to receive approximately 45,000 barrels per day of renewable feedstocks. (AR  
23 103086; 103096.) At the same time, the Unit 250 project would produce 9,000 barrels per day of  
24 renewable feedstocks. (AR 103087; 103096.) The capacity for Unit 250 was later changed to  
25 12,000 bpd. (AR 54218.) It seems that the changes to the NuStar facility would allow for it to  
26 receive additional renewable feedstock beyond the amounts that can be processed by Unit 250;  
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1 possibly up to 33,000 barrels per day that would not be used by Unit 250. It is not clear where the  
2 other 33,000 barrels will be used, but the Project discusses obtaining feedstocks from several  
3 sources, including rail transport. The DEIR also noted that rail traffic at the Rodeo facility would  
4 increase from 4.7 railcars per day to 16 railcars per day. (AR 53805; see also AR 7998 [comment  
5 discussing rail traffic].) It is unclear from the record whether any of this increase in rail traffic  
6 would go through the NuStar facility.  
7

8         Respondents argue that the NuStar facility is only handling pretreated feedstocks and that  
9 only Unit 250 will be processing pretreated feedstocks. The record partially supports this argument  
10 as the record shows that Unit 250 will process pretreated feedstocks. (AR 103087.) But the record  
11 also shows that the Project is designed to process “a comprehensive range of renewable feedstocks,  
12 including treated and untreated feedstocks”. (AR 53730, 53733.) Thus, the fact that NuStar will  
13 only handle pretreated feedstocks does not mean that the Project is not designed to process  
14 feedstocks from NuStar.  
15

16         Given this evidence, the Court finds that the changes to the NuStar terminal increased its  
17 renewable feedstock capacity well beyond that which was required for Unit 250. Given the  
18 proximity in time and location between the NuStar and Unit 250 projects and the Rodeo Renewed  
19 Project, the Court finds that the failure to consider the changes to the NuStar facility in the EIR at  
20 issue here was improper piecemealing. The Court notes that the record regarding NuStar is limited  
21 and with more information it may be possible to show that NuStar’s changes can be considered a  
22 separate project but on the current record the Court cannot make this finding.  
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25         Petitioners also argue that the 2,300 feet of pipe that was included in the Unit 250 changes  
26 constituted improper piecemealing. As part of the Unit 250 project, Phillips 66 had 2,300 feet of  
27 pipe (sometimes referred to as 2,500 feet of pipe) installed. The pipe runs from the NuStar facility  
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1 to the Rodeo facility and is entirely on Phillips 66 property. (AR 103087-88.) The pipe is used to  
2 receive pretreated renewable feedstocks from the adjacent NuStar Terminal. (AR 103087.) The  
3 pipe is described as a 12" pipe. (AR 103084, 103088.) Petitioners argue that the pipe has capacity  
4 of 45,000 barrels per day, but the Court's review of the record citations does not support this point.  
5 (AR 2304, 103096.)  
6

7         Petitioners have not shown that the 2,300 feet of pipeline would not have been installed but  
8 for the Rodeo project. There is also no showing that the size of the pipe was increased beyond what  
9 would be reasonable to transport feedstocks to Unit 250. The Court finds that the 2,300 feet of  
10 pipeline is not improper piecemealing because it was necessary for the Unit 250 project and would  
11 have been installed for that project regardless of the Rodeo Renewable Project.  
12

13         As to the remainder of the Unit 250 Project, the Court is not convinced that excluding Unit  
14 250 from the EIR was improper piecemealing. The record shows that the conversions at Unit 250  
15 were mostly separate from the Project here. Furthermore, the purposes of the Unit 250 Project and  
16 the Rodeo Renewed Projects are different. Unit 250 is designed to process a relatively small  
17 amount of pretreated renewable feedstocks, while the Rodeo Renewed Project is designed to  
18 change the entire Rodeo facility from a petroleum facility to one that only processes renewable  
19 feedstocks. The Court also finds that Unit 250 and this Project would have happened  
20 independently from each other and thus, there was not improper piecemealing for most of the  
21 changes to Unit 250.  
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24         In the alternative, Petitioners argue that the failure to discuss Unit 250 in the cumulative  
25 impact section was an error. The changes to Unit 250 were not discussed in the cumulative impact  
26 section in the DEIR. (AR 54245-47.) Respondents dismiss this issue by pointing out that Unit 250  
27 was discussed in the baseline analysis. The baseline for renewable feedstocks in the DEIR is listed  
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1 as zero. (AR 53654.) However, it was also noted that Unit 250 had a capacity to produce 12,000  
2 bpd of renewable fuels, but that it was not producing those fuels during the 2019 baseline period.  
3 (AR 53654.) In addition, in the summary of alternatives to the Project, it is noted that Unit 250 has  
4 a capacity to produce 12,000 bpd in renewable fuels. (AR 54218-219.) The DEIR notes that Unit  
5 250 has the capacity of producing 12,000 bpd of renewable fuels while the Project would produce  
6 55,000 bpd of renewable fuels. (AR 53654.) The capacity at Unit 250 amounts is over 15% of the  
7 renewable fuel capacity at the Rodeo facility when the Project is fully operational. A couple of  
8 footnotes regarding Unit 250's renewable fuels processing does not sufficiently explain the  
9 cumulative impact of Unit 250 along with the Project. The Court finds that the EIR violated CEQA  
10 by failing to include Unit 250 in the cumulative impact analysis.  
11

12  
13 B. Estimating Mix of Feedstocks

14 An EIR must have a proper description of the project. “[W]hether the EIR's project  
15 description complied with CEQA's requirements, the standard of review is de novo. [Citations.]”  
16 (*stopthemillenniumhollywood.com, supra*, 39 Cal.App.5th 1, 15.)  
17

18 As part of the description of the Project, the EIR describes that the modified facility would  
19 use a variety of different substances as inputs, including “but not be limited to” used cooking oil,  
20 fats, oils, and grease, tallow (animal fat), inedible corn oil, canola oil, soybean oil, “other  
21 vegetable-based oils, and/or emerging and other next-generation feedstocks.” (AR 053735.)  
22

23 Petitioners contend that which of these inputs are used, in what proportions, significantly  
24 changes the environmental impacts of the project, specifically carbon emissions and hydrogen  
25 usage (which leads to other GHG emissions), indirect land use impacts and odor issues. The record  
26 does contain evidence that indicates that the different feedstocks could lead to different emissions,  
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28

1 and quantifies the difference between the different types of feedstock. "Switching to new and  
2 different feedstock has known potential to increase refinery emissions and to create new and  
3 different process hazards and feedstock acquisition impacts.... However, the DEIR does not  
4 describe the chemistries, processing characteristics, or types and locations of feed extraction  
5 sufficiently to evaluate potential impacts of the proposed feedstock switch." (AR 471; see also AR  
6 25354.) A comment letter also described feedstocks involving fats, oils and grease as "highly  
7 malodorous". (AR 2625.)

9 In comments to the Draft EIR, Petitioners argued that "the County should have evaluated a  
10 'reasonable worst-case scenario' for feedstock consumption and its impacts" and that "the County  
11 was required to evaluate a reasonable array of scenarios, including but not necessarily limited to  
12 the worst-case scenario, in order to provide full disclosure." (AR 278; 2281.) "Comments also  
13 contend that appropriate Draft EIR impact analysis should reflect historic, current, and projected  
14 feedstock availability that will influence the proportional selection of feedstocks as demand for  
15 feedstocks increases." (AR 2281.) Petitioners also argue that, based on the information available, a  
16 large portion of the feedstocks would come from food crop oils. (AR 279; see also, 2282.)

18 The FEIR does not, however, make any estimate of the likely mix of feedstocks and the  
19 combined effect of the various mixtures. In response to comments, Respondents explained that  
20 they are not required to conduct a worst case analysis and that CEQA only "requires analysis of  
21 reasonably foreseeable impacts 'in terms of what is reasonably feasible.' " (AR 2282.) The FEIR  
22 also explained that the DEIR provided information on potential feedstocks, but where there is no  
23 reliable forecasting, "CEQA requires only that the County use its best efforts to find out and  
24 disclose all it reasonably can..." (AR 2282.) Petitioners also argued that the County erred when it  
25 claimed the Project would not use meaningful amounts of soybean oil. The FEIR stated that  
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1 “comment[s] that feedstocks will utilize food crops and oils, particularly soybean, are not  
2 consistent with available data.” The FEIR explained that the credits provided for soy oil are much  
3 lower than those provided for cooking oil. (AR 2279.) Petitioners argue that the NuStar facility will  
4 unload 45,000 bpd of soybean oil and that only a portion of that soybean oil would be used by Unit  
5 250. The record does not support Petitioners’ assumption. While a County employee stated that  
6 NuStar would receive 45,000 bpd of soybean oil, the accompanying permits and project description  
7 state that NuStar would receive 45,000 bpd of “soybean oil and other renewable feedstocks”. (AR  
8 103083-86, 103096.) Petitioners also point to Phillips 66’s applications to CARB that include  
9 soybean oil, but those were for Unit 250 and do not mean that the rest of the facility will use  
10 significant amounts of soybean oil. (AR 26059-60.)  
11

12  
13 The EIR should consider the relative mix of these inputs, to the extent it can be estimated,  
14 but not if it would be speculative. The record, however, does not appear to contain substantial  
15 evidence concerning the likely mixtures of feedstocks that would be used. In the absence of any  
16 information indicating past history or even a forward-looking, but factually informed, basis for an  
17 estimate, following Petitioners’ suggestions and making projections based on all of the different  
18 possibilities, including a worst-case scenario, would be an exercise in the hypothetical, and not  
19 based on reliable information concerning their likelihood. In other words, it would be speculative.  
20

21 Petitioners contend that even if the actual mix cannot be predicted, a worst-case scenario  
22 could be used. Use of worst-case scenarios has been discussed in a number of cases.  
23

24 *stopthemillenniumhollywood.com, supra*, 39 Cal.App.5th 1 rejected using worst-case  
25 scenario where project description included different conceptual scenarios for development instead  
26 of including the size, mass, or appearance of proposed buildings on the site. The court explained  
27 that it was not enough that “the worst-case-scenario environmental effects have been assumed,  
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1 analyzed, and mitigated” and development does not exceed those mitigation measures. “CEQA’s  
2 purposes go beyond an evaluation of theoretical environmental impacts. ‘If an EIR fails to include  
3 relevant information and precludes informed decision making and public participation, the goals of  
4 CEQA are thwarted and a prejudicial abuse of discretion has occurred.’ [Citation.]”  
5 (*stopthemillenniumhollywood.com v. City of Los Angeles, supra*, 39 Cal.App.5th at 18.)  
6

7 In *Citizens for a Sustainable Treasure Island v. City and County of San Francisco* (2014)  
8 227 Cal.App.4th 1036 a worst-case type analysis was approved. There, the EIR included different  
9 potential building development options, but with more detail than in  
10 *stopthemillenniumhollywood.com*. The court in *Treasure Island* approved of “the EIR’s focus on  
11 the maximum impacts expected to occur at full buildout [because it] promoted informed decision  
12 making, and evidences a good faith effort at forecasting what is expected to occur if the Project is  
13 approved.” (*Id.* at 1053, fn. 7.)  
14

15 “ ‘ “CEQA requires that an EIR make ‘a good faith effort at full disclosure.’ [Citation.] ‘An  
16 EIR should be prepared with a sufficient degree of analysis to provide decisionmakers with  
17 information which enables them to make a decision which intelligently takes account of  
18 environmental consequences.’ ” ’ (*Save the El Dorado Canal v. El Dorado Irrigation Dist.* (2022)  
19 75 Cal.App.5th 239, 264 (*El Dorado*).) An EIR ‘is required to study only reasonably foreseeable  
20 consequences of’ a project. (*High Sierra Rural Alliance v. County of Plumas* (2018) 29  
21 Cal.App.5th 102, 125.) ‘CEQA does not require an agency to assume an unlikely worst-case  
22 scenario in its environmental analysis.’ (*Id.* at p. 126.)” (*East Oakland Stadium Alliance v. City of*  
23 *Oakland* (2023) 89 Cal.App.5th 1226, 1252.)  
24

25 “ ‘[A]n EIR is not required to engage in speculation in order to analyze a “worst case  
26 scenario.” ’ (*Napa Citizens for Honest Government v. Napa County Bd. of Supervisors* (2001) 91  
27  
28



1 Cal.App.4th 342, 373, citing *Towards Responsibility in Planning v. City Council* (1988) 200  
2 Cal.App.3d 671.)” (*High Sierra Rural Alliance v. County of Plumas* (2018) 29 Cal.App.5th 102,  
3 122.)

4       Petitioners also argue that *Communities for a Better Environment v. City of*  
5 *Richmond* (2010) 184 Cal.App.4th 70 (*CBE v. Richmond*) applies here and shows that Respondents  
6 need to do more in describing the likely feedstock mix for the Project. In *CBE v. Richmond* the  
7 issue was whether the EIR failed to properly discuss whether a reasonably foreseeable consequence  
8 of the project would include the processing for lower quality, heavier crude. (*Id.* at 83.) The EIR  
9 stated in conclusory terms that it would not increase capacity to process heavier crude, but the  
10 court noted that the record showed conflicting evidence on that issue. (*Ibid.*) The court found that  
11 the EIR failed as an informational document because the project description was inconsistent and  
12 obscure as to whether the project would enable the refinery to process heavier crude. (*Id.* at 89.)

13       Unlike *CBE v. Richmond*, the description of feedstocks for this Project is not obscure or  
14 inconsistent with the evidence. Petitioners argue that in this case the EIR failed to disclose that  
15 Unit 250 would use soybean oil and that the NuStar terminal would provide up to 45,000 bpd of  
16 soybean oil. As discussed above, the Court finds that Unit 250 should have been included as  
17 cumulative impact, but was not required to be analyzed as part of the Project. The Court’s review  
18 of the record shows that NuStar terminal would provide capacity for 45,000 bpd of renewable  
19 feedstocks, but the record does not support that such feedstocks would be soybean oil.

20       It is possible that a worst-case analysis of the feedstocks would comply with CEQA,  
21 however, such a worst-case analysis is not required. Instead, Respondents are required to make a  
22 good faith effort to include a description of the likely or reasonably foreseeable mixtures of  
23 feedstock. Here the question is whether a description of the likely types of feedstocks constitutes a  
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1 good faith effort at describing the feedstocks in the Project Description, or whether Respondents  
2 needed to do more by including various estimates of the likely amounts of feedstock. The Court  
3 finds that including estimates on the likely amounts of feedstocks is unduly speculative given the  
4 shifting nature of the renewable feedstock market.

5  
6 Furthermore, Petitioners have not shown that the failure to include more information on the  
7 likely amounts of feedstocks negatively affected the analysis of the environmental impact from the  
8 Project. As discussed below, the Court finds that additional discussion on how this Project will  
9 impact indirect land use changes would be too speculative. Thus, a better estimate of the different  
10 types of feedstocks used at this facility will not change the indirect land use analysis as more  
11 information on what this facility is likely to use will not change the speculative nature of that  
12 analysis.

13  
14 Finally, the Court must consider whether the odor mitigation analysis could be better with  
15 an estimate as to the likely amounts of various feedstocks. It is worth noting here that certain  
16 feedstocks, such as animal fats, are known to create more objectionable odors than plant-based  
17 feedstocks. Yet, the EIR concluded that there would be potentially significant odor impacts from  
18 the Project that could be reduced to less than significant with mitigation. More specific information  
19 on the amounts of feedstocks would not change the analysis of the potential odor impacts. While  
20 the Court finds that the EIR improperly deferred mitigation of the odor impacts, it is not convinced  
21 that more information on the amounts of feedstocks is necessary for a properly drafted odor  
22 mitigation measure.

23  
24 Therefore, the Court finds that the Project Description is sufficient and that the EIR is not  
25 required to include additional information on the likely amounts of feedstocks.



1 C. Discussion of Indirect Land Use changes

2 CEQA requires that agencies consider the indirect changes in land use caused by projects,  
3 but not if they are speculative. Indirect land use changes are cognizable under CEQA as a basis for  
4 a finding that the project will significantly affect the environment, *if* a sufficient showing is made.  
5 (*Muzzy Ranch Co. v. Solano County Airport Land Use Com.* (2007) 41 Cal.4th 372, 383.)  
6

7 Petitioners argue that the project will result in the conversion of existing lands that either lie fallow  
8 (or are currently forested) are used to grow other crops that are used as feedstock for the project.  
9 Some of these changes, particularly production of soybeans, involve adoption of more intensive  
10 agricultural practices that consume more water and otherwise affect the environment.

11 Accordingly, the CEQA Guidelines address the issue, requiring analysis of indirect land use  
12 changes if they are “reasonably foreseeable.” (CEQA Guidelines §§ 15064(d), 15358(a)(2).)  
13

14 While many cases discuss this issue, typically the issue is raised in the context of displaced  
15 physical development. As the Supreme Court stated, “a government agency may reasonably  
16 anticipate that its placing a ban on development in an area of a jurisdiction may have the  
17 consequence, notwithstanding existing zoning or land use planning, of displacing development to  
18 other areas of the jurisdiction.” (*Muzzy Ranch Co., supra*, 41 Cal.4th at 383.) Nor does the fact  
19 that subsequent developments will require further approvals automatically negate the requirement,  
20 although it is a factor that may be considered. (*Id.*, at 383 and 388.) As the court noted in *Muzzy*  
21 *Ranch*, “nothing inherent in the notion of displaced development places such development, *when it*  
22 *can reasonably be anticipated*, categorically outside the concern of CEQA.” (*Id.*, [emphasis  
23 added].)  
24

25  
26 The line between the two appears to be very fact-specific. In *Stanislaus Audubon Society,*  
27 *Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 158, the court considered whether  
28

1 construction of a golf course could lead to residential development. The fact that those effects  
2 (development of housing) would go through their own environmental review process did not avoid  
3 the issue. There were no pending applications at the time. The county had stated that past  
4 experience had shown that golf courses were “a catalyst which triggers requests for residential  
5 development.” (*Id.*, at 16, 158.) As the court stated, “The record here clearly contains substantial  
6 evidence supporting a fair argument the proposed country club may induce housing development in  
7 the surrounding area. The fact that the exact extent and location of such growth cannot now be  
8 determined does not excuse the County from preparation of an EIR.” (*Id.*) The court went on to  
9 note that the petition is not required to prove that the project “will have a growth-inducing effect or  
10 to present evidence demonstrating it had already spurred growth in the surrounding area. To the  
11 contrary, appellant is required only to demonstrate that the record contains substantial evidence  
12 sufficient to support a *fair argument* that the project *may* have a significant growth inducing  
13 effect.” (*Id.*, at 152-153 [emphasis in original].)  
14  
15

16 In *Aptos Council v. County of Santa Cruz* (2017) 10 Cal. App.5th 266, 293, the court noted  
17 the same standards, but reached a different result based on the facts in the record. The ordinance in  
18 question changed standards for construction of hotels in a manner that was intended to encourage  
19 more development. The court stated that “when evaluating the potential environmental impact of a  
20 project that has growth-inducing effects, an agency is not excused from environmental review  
21 simply because it is unclear what future developments may take place. It must evaluate and  
22 consider the environmental effects of the ‘most probable development patterns.’” (*Id.*, at 292-293,  
23 quoting *City of Antioch v. City Council* (1986) 187 Cal.App.3d 1325, 1337.) Ultimately, however,  
24 the court concluded that while the ordinance reflected the County’s “hope” that it would result in  
25 more hotels, the record did not show that it was “reasonably foreseeable, rather than an ‘optimistic  
26  
27  
28



1 gleam in [the County's] eye.'" (*Id.*, at 294.) Thus, it found that no Environmental Impact Report  
2 was required.

3  
4 In some instances, the foreseeability of the impact affects not simply whether the issue must  
5 be discussed, but the level of detail required. (*Muzzy Ranch Co.*, *supra*, 41 Cal.4th at 388.)

6 In response to comments, the FEIR stated that it would be too speculative to analyze  
7 indirect land use impacts because the mix of feedstocks, as well as their sources, cannot reasonably  
8 be predicted. (AR 2284.) The response also explained that based on California Air Resources  
9 Board's Low Carbon Fuels Standard Program the majority of feedstocks so far have been waste-oil  
10 and tallow. (AR 2284.)

12 Petitioners argue that the Project will cause significant and unavoidable land use impacts.  
13 Petitioners cite to three articles discussing potential land use changes caused by an increased  
14 demand in bio feedstocks. (AR 21903, 23905, 59292.) These articles explain that an increased  
15 demand for certain feedstocks may result in deforestation, which can have a number of negative  
16 impacts including negative impacts on biodiversity and threatening food and water security. (AR  
17 21903.) Two of the articles note a particular problem with palm oil, however, palm oil will not be  
18 used at the Phillips 66 facility. (AR 23905, 59292.) One of the articles explained that the  
19 International Panel on Climate Change rated certain feedstocks as having a high risk of indirect  
20 land use changes. Based on that system, palm oil was identified as high risk while soy was not.  
21 (AR 23911.)

24 In addition to these articles, Petitioners' point to the 2018 FEIR for proposed Amendments  
25 to low carbon fuel standards and the alternative diesel fuels regulation. (AR 19426.) The 2018  
26 FEIR explained that biofuel crop production may cause more fuel-based agricultural and thus cause  
27  
28

1 indirect land use where the loss of food-based agriculture results in conversion of rangeland,  
2 grassland, forests, and other land uses to agriculture. (AR 19493.) The 2018 FEIR concluded there  
3 was a potentially significant impact on indirect land use, but it could not be mitigated by the  
4 California Air Resources Board because CARB had no authority over land use regulation. (AR  
5 19494.)  
6

7         Petitioners show that in general there may be some impacts on land use from an increase in  
8 biofuels on a large scale. But Petitioners' evidence does not show that this Project will have a  
9 significant impact on land use changes. In addition, much of Petitioners' cited evidence focuses on  
10 the harmful effects of palm oil, which, as noted above, will not be used at this facility. The Court  
11 finds that providing more analysis on the indirect land use impacts would be too speculative and  
12 thus, the failure to include additional analysis did not violate CEQA.  
13

#### 14         D. Cumulative ILUC impacts

15         Petitioners also argue that Respondents failed to consider the cumulative impact of similar  
16 projects on indirect land use changes.  
17

18         "The EIR must discuss cumulative impacts. (Guidelines, § 15130.) That is, the EIR must  
19 discuss the impacts of the project over time in conjunction with past, present and reasonably  
20 foreseeable future projects. (§ 21083; Guidelines, § 15130.) Guidelines section 15130, subdivision  
21 (b) provides that '[t]he discussion of cumulative impacts shall reflect the severity of the impacts  
22 and their likelihood of occurrence, but the discussion need not provide as great detail as is provided  
23 of the effects attributable to the project alone. ...' Thus, an EIR which completely ignores  
24 cumulative impacts of the project is inadequate. [Citation.] But a good faith and reasonable  
25 disclosure of such impacts is sufficient. [Citation.]" (*Fairview Neighbors v. County of*  
26 *Ventura* (1999) 70 Cal.App.4th 238, 245.)  
27  
28



1 “An agency's selection of the geographic area impacted by a proposed development,  
2 however, falls within the lead agency's discretion, based on its expertise. (Guidelines, § 15130,  
3 subd. (b)(3); *City of Long Beach v. Los Angeles Unified School Dist.* (2009) 176 Cal.App.4th 889,  
4 907.) Moreover, discussion of cumulative impacts in an EIR “should be guided by the standards  
5 of practicality and reasonableness.” [Citation.] Absent a showing of arbitrary action, a reviewing  
6 court must assume the agency has exercised its discretion appropriately. [Citation.]” (*South of*  
7 *Market Community Action Network v. City and County of San Francisco* (2019) 33 Cal.App.5th  
8 321, 338.)

10 In *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692 the court held  
11 that the cumulative air quality impact analysis was insufficient because it only considered a portion  
12 of the San Joaquin Valley. Initially, respondents had agreed to include the entire air basin in the  
13 FEIR, but ultimately decided to keep the smaller area for the cumulative impact analysis without  
14 providing an explanation. The court found that the FEIR was inadequate under CEQA because the  
15 cumulative impacts did not include similar projects in the entire air basin. In reaching this  
16 conclusion, the court noted that information on the excluded projects was available through several  
17 sources. (*Id.* at 722-724.)

19 In *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859  
20 the court found the EIR for a water diversion project was inadequate because it did not consider the  
21 cumulative impacts of another pending governmental action that could significantly affect water  
22 supply.  
23

24 The DEIR considered several other projects in the vicinity of the Rodeo facility as well as  
25 projects near the Santa Maria site. (AR 54245-47.) The cumulative impact section included a  
26 discussion of the Martinez Refinery project, which involves transforming that refinery into a  
27  
28

1 facility that processes renewable feedstocks, similar to the Project here. (AR 54246.) The FEIR  
2 explained that the cumulative impacts related to renewable feedstocks are too speculative and  
3 unable to be quantified. (AR 2274-75.)

4         Petitioners argue that the EIR should have considered the nearly 20 other renewable fuel  
5 conversion projects in California and throughout the nation. (AR 727; see also AR 10493-95.)

6         Here, the EIR considered the Martinez facility, which was arguably necessary for a proper  
7 cumulative impact analysis. Given the similarity of the two projects, the relatively close proximity  
8 of the two projects (approximately 10 miles) and the fact that the two projects (if they become  
9 operational) will be two of the largest biodiesel facilities in California. The question here is  
10 whether Respondents were required to go beyond the Martinez facility and consider other biodiesel  
11 facilities in California or perhaps the entire nation. (Whether the EIR needed to consider the  
12 changes to Unit 250 as a cumulative impact is discussed above.)

13         The Court is concerned that on a statewide or nationwide scale, there may be some indirect  
14 land use effects. (Such effects were discussed in CARB's 2018 FEIR. (AR 19493-94.)) The  
15 problem here is where should the line be drawn? In most of the cases cited by the parties, there was  
16 a clear geographical boundary, which is near the Project site. Using a statewide boundary when  
17 considering a change to a state law or regulation makes sense, but the Court is not convinced that  
18 the same logic for requiring a statewide boundary applies to this Project.

19         Assuming that the Court is convinced that the EIR should have considered more biodiesel  
20 or renewable fuel facilities in California, the Court is still concerned that the indirect land use  
21 changes are too speculative. It does not appear practical for Respondents to estimate what the likely  
22 mix of feedstocks will be at each facility. The Court finds that the failure to include more analysis  
23 on the cumulative indirect land use impacts did not violate CEQA.



1 E. Deferral of Odor Mitigation

2 The DEIR stated that during refinery operations the impacts from odor would have less than  
3 significant with mitigation. (AR 53809, 53828.) The odor concerns include that “renewable  
4 feedstocks can create odors similar to an animal and/or food processing facility unless properly  
5 managed through good engineering practices during project development combined with an Odor  
6 Management Plan after Project completion.” (AR 53827.) The DEIR goes on to note that these  
7 principals are currently used at the facility and will continue to be used after the completion of the  
8 Project. (*Ibid.*)  
9

10  
11 In order to lessen the impacts from odor, the EIR includes mitigation measure AQ-4. (AR  
12 2322, 53829.) In the DEIR, AQ-4 states that during the construction phase of the Project an Odor  
13 Management Plan (OMP) would be development and implemented. (AR 53829.) The FEIR  
14 provided additional guidance on AQ-4, including: (1) the OMP will be developed and reviewed by  
15 the County and the Air District, (2) the OMP will be an “evergreen” document that will be updated  
16 overtime, (3) the OMP will include guidance for proactive identification and documentation of  
17 odors and (4) every odor complaint will be investigated with a goal of identifying if the odor  
18 originated from the facility and if so, to determine the cause of the odor and remediate the odor.  
19 (AR 2322; see also AR 776-777.)  
20

21 The DEIR describes some additional odor management controls, which are not included in  
22 the mitigation measure. The DEIR provides a two-page discussion on different types of odor  
23 management controls. (AR 53827-28.) The DEIR provides includes a discussion on how to control  
24 odor from tallow feedstocks. (AR 53827 and 53738.) A staff report addresses the claim that the  
25 odor mitigation is an improperly deferred mitigation by claiming that if the OMP is developed too  
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27  
28

1 early, it would not be effective. (AR 922.) Respondents also point to the Air District's Regulation 7  
2 on regarding odors. (Respondents RJN F.)

3  
4 Finally, the FEIR noted that a draft OMP existed and was being reviewed by the County.  
5 (AR 2322.) The draft OMP provides additional information on how odors will be reduced or  
6 eliminated. (AR183007-183014.)

7  
8 Where an EIR identifies significant impacts from the project, it must also include feasible  
9 mitigation measures for those impacts. (Pub. Res. Code § 21081.6(b), CQA Guidelines S  
10 15126.4(a)(2).) Here, the EIR identified "objectionable odors" as "potentially significant." It then  
11 identified a mitigation measure consisting of "the operational Odor Management Plan," which  
12 "shall be developed and implemented upon commissioning of the renewable fuels processes,  
13 intended to become an integrated part of daily operation of the facilities. While the EIR contains  
14 other language referring to the OMP preventing objectionable odors, and that it "shall outline  
15 equipment that is in place and procedures that facility personnel shall use to address odor issues," it  
16 identifies no actual mechanism or whether it would reduce or eliminate the odors in question.

17  
18 Mitigation measures may be deferred where they "specify performance standards which  
19 would mitigate the significant effect of the project and which may be accomplished in more than  
20 one specified way." (CEQA Guidelines § 15126.4(a)(1)(B).) This is permissible where the agency  
21 "commits itself to mitigation and lists the alternatives to be considered, analyzed and possibly  
22 incorporated in the mitigation plan. [Citation.]" (*Defend the Bay v. City of Irvine* (2004) 119  
23 Cal.App.4th 1261, 1275.) As that court stated in more detail:

24  
25  
26 " " "[F]or [the] kinds of impacts for which mitigation is known to be feasible, but where  
27 practical considerations prohibit devising such measures early in the planning process  
28



1 (e.g., at the general plan amendment or rezone stage), the agency can commit itself to  
2 eventually devising measures that will satisfy specific performance criteria articulated at  
3 the time of project approval. Where future action to carry a project, forward is  
4 contingent on devising means to satisfy such criteria, the agency should be able to rely  
5 on its commitment as evidence that significant impacts will in fact be mitigated.

6 [Citations.]” ’ [Citation.]” (*Id.* at 1275-76.) “On the other hand, an agency goes too far  
7 when it simply requires a project applicant to obtain a biological report and then comply  
8 with any recommendations that may be made in the report. [Citation.]” (*Id.* at 1275.)

9  
10 In order to defer mitigation measures, the lead agency must find that providing details on a  
11 mitigation measure is “impractical or infeasible at the time the EIR was certified.” (*Preserve Wild*  
12 *Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281; see also CEQA Guidelines §  
13 15126.4(a)(1)(B), *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th  
14 645, 671 and *Save Agoura Cornell Knoll v. City of Agoura Hills* (2020) 46 Cal.App.5th 665, 687-  
15 688.)

16  
17 *Rominger v. County of Colusa* (2014) 229 Cal.App.4th 690 is distinguishable from the case  
18 here. *Rominger* found an odor mitigation measure, similar to the one here, was not an improperly  
19 deferred mitigation measure. (*Id.* at 723-724.) In 2014, the relevant CEQA Guideline stated that  
20 “Formulation of mitigation measures should not be deferred until some future time. However,  
21 measures may specify performance standards which would mitigate the significant effect of the  
22 project and which may be accomplished in more than one specified way.” (CEQA Guideline  
23 §15126.4(a)(1)(B) (2014).) The CEQA Guidelines in effect in 2014 have been modified. They  
24 now include the “impractical or infeasible” finding and *also* require that “the agency (1) commits  
25 itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and  
26  
27  
28

1 (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard  
2 and that will be considered, analyzed, and potentially incorporated in the mitigation measure.”  
3 (CEQA Guideline §15126.4(a)(1)(B) (2022).) The analysis in *Rominger* did not consider the  
4 standards in the current CEQA Guidelines and thus, *Rominger* does not apply here.

5 “Courts have approved deferring the formulation of the details of a mitigation measure  
6 where another regulatory agency will issue a permit for the project and is expected to impose  
7 mitigation requirements independent of the CEQA process so long as the EIR included  
8 performance criteria and the lead agency committed itself to mitigation. [Citation.]” (*Clover Valley*  
9 *Foundation v. City of Rocklin* (2011) 197 Cal.App.4th 200, 237.) *Clover Valley* found a mitigation  
10 measure was not improperly deferred where it required the real party to obtain necessary permits  
11 from two government agencies that were not the lead agency. (*Id.* at 235, 237.) Similarly, in *North*  
12 *Coast Rivers Alliance v. Marin Municipal Water Dist. Bd. of Directors* (2013) 216 Cal.App.4th  
13 614 the court found a mitigation was not improperly deferred where consultation with NOAA  
14 Fisheries was required as part of the federal permitting process under the Clean Water Act and the  
15 Endangered Species Act, as well as an express term in the EIR. (*Id.* at 647.)

16 In addition to case law, the CEQA Guidelines state that “compliance with a regulatory  
17 permit or other similar process may be identified as mitigation if compliance would result in  
18 implementation of measures that would be reasonably expected, based on substantial evidence in  
19 the record, to reduce the significant impact to the specified performance standards.” (CEQA  
20 Guideline § 15126.4(a)(1)(B).)

21 Petitioners argue that the odor mitigation measure AQ-4 is an improperly deferred  
22 mitigation because the County did not find that it was impractical or infeasible to include details of  
23 the mitigation measure when the EIR was certified. Respondents have not shown how this  
24



1 threshold requirement was met. The County did not make the required finding in the EIR. In  
2 addition, a draft Odor Management Plan was available when the EIR was certified, but it is unclear  
3 why a final version of the document could not be completed. (AR 183007.) Thus, as an initial  
4 matter, the EIR fails to comply with CEQA because it has not shown that it was impractical or  
5 infeasible to include the details odor mitigation measure at the time the EIR was certified.  
6

7 In addition to the threshold issue, a related question is whether there are feasible measures  
8 to mitigate the odor, which are already known to exist, but simply can't be specified until more is  
9 known about the odor problem.  
10

11 The Court finds that the record does not show that there are feasible mitigation measures,  
12 which could not be finished when the EIR was certified due to practical considerations.  
13 Furthermore, while an operating permit from the Air District might be sufficient in some cases to  
14 show a mitigation measure is not improperly deferred, the record here does not support that  
15 conclusion. Mitigation measure AQ-4 does not state that the Air District will issue a permit. An Air  
16 District permit will be required for construction and operations. (AR 53688, 53792-93.) But, the  
17 record does not show that the Air District's permit will sufficiently address the odor concerns  
18 raised by Petitioners. Therefore, the Court finds that the County violated CEQA by allowing  
19 deferred mitigation for the odor impacts without complying with CEQA Guidelines §  
20 15126.4(a)(1)(B).  
21

#### 22 F. Requests for Judicial Notice 23

24 Petitioners' request for judicial notice is granted as to B. Requests A, C and D are denied as  
25 these documents were not in existence when the EIR was certified.  
26  
27  
28

1 Respondents' requests for judicial notice are granted as to C, D, E, F and G. Requests A  
2 and B are denied as the Court cannot tell whether these documents were in existence when the EIR  
3 was certified.

4  
5 IV. CONCLUSION

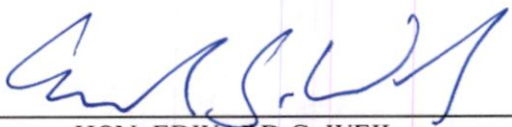
6 Accordingly, the Court's rulings on the issues are:

- 7  
8 1. The project description improperly omitted changes to the NuStar terminal, but did not  
9 improperly omit Unit 250;  
10 2. Unit 250 was improperly omitted from the cumulative impact section;  
11 3. The project description with respect to the mix of feedstocks was sufficient;  
12 4. The discussion of Indirect Land Use Impacts was sufficient;  
13 5. The discussion of cumulative Indirect Land Use Impacts was sufficient;  
14 6. The discussion of Odor Mitigation Measures was insufficient.

15 This matter will be remanded to the County for reconsideration of the NuStar and Unit 250  
16 projects and the odor mitigation measure. Because the piecemealing and cumulative impact issues  
17 affect the entire analysis of the project, the Court will order the County to set aside its certification  
18 of the EIR. The CEQA violations found here relate to operation of the Project, but not to  
19 construction of the Project. Therefore, the Court will not issue an injunction preventing Phillips  
20 from continuing its construction activities while the County reconsiders these issues.  
21

22 The parties shall submit proposed writs and judgments by August 18, 2023.

23  
24  
25 Dated: July 20, 2023

  
HON. EDWARD G. WEIL  
Judge of the Superior Court



SUPERIOR COURT – MARTINEZ  
COUNTY OF CONTRA COSTA  
MARTINEZ, CA 94553  
EMAIL: dept39@contracosta.courts.ca.gov

CLERK'S CERTIFICATE OF E-MAILING

CASE NUMBER: N22-1080

THIS NOTICE/DOCUMENT HAS BEEN SENT TO ALL ATTORNEYS/PARTIES LISTED BELOW:

PLAINTIFF'S COUNSEL: DEBORAH SIVAS, ESQ.: [dsivas@stanford.edu](mailto:dsivas@stanford.edu)  
STEPHANIE SAFDI, ESQ.: [ssafdi@stanford.edu](mailto:ssafdi@stanford.edu)  
MATTHEW SANDERS, ESQ.: [matthewjsanders@stanford.edu](mailto:matthewjsanders@stanford.edu)  
ELLISON FOLK, ESQ.: [Folk@smwlaw.com](mailto:Folk@smwlaw.com)  
JOSEPH PETTA, ESQ.: [Petta@smwlaw.com](mailto:Petta@smwlaw.com)  
LAUREN TARPE, ESQ.: [LTarpey@smwlaw.com](mailto:LTarpey@smwlaw.com)  
SHANA LAZEROW, ESQ.: [slazerow@cbecal.org](mailto:slazerow@cbecal.org)  
CONSTANCE CHO, ESQ.: [ccho@cbecal.org](mailto:ccho@cbecal.org)

RESPONDENT'S COUNSEL:

VICTORIA BOGDAN, ESQ.: [vbogdantejeda@biologicaldiversity.org](mailto:vbogdantejeda@biologicaldiversity.org)  
HOLLIN KRETZMANN, ESQ.: [hkretzmann@biologicaldiversity.org](mailto:hkretzmann@biologicaldiversity.org)  
THOMAS GEIGER, ESQ.: [thomas.geiger@cc.cccounty.us](mailto:thomas.geiger@cc.cccounty.us)  
STEPHEN SIPTROTH, ESQ.: [stephen.siptroth@cc.cccounty.us](mailto:stephen.siptroth@cc.cccounty.us)

COUNSEL FOR REAL PARTY IN INTEREST:

NICKI CARLSEN, ESQ.: [nicki.carlsen@alston.com](mailto:nicki.carlsen@alston.com)  
MATTHEW WICKERSHAM, ESQ.: [matt.wickersham@alston.com](mailto:matt.wickersham@alston.com)  
MEGAN AULT, ESQ.: [megan.ault@alston.com](mailto:megan.ault@alston.com)

I declare under penalty of perjury that I am not a party to this action, and that I served a copy of this notice/document to the person(s) listed above via e-mail from MARTINEZ, CA

TITLE OF DOCUMENT SERVED: STATEMENT OF DECISION FROM 7/12/23 SUBMISSION

DATE E-MAILED: 7/21/23

BY   
C. FORFANG, Deputy Clerk

# **APPENDIX B**

## **Declarations**



**Lashun Cross**

Contra Costa County

Department of Conservation and Development

1 THOMAS L. GEIGER (State Bar No. 199729)  
County Counsel  
2 KURTIS C. KELLER (State Bar No. 287724)  
Assistant County Counsel  
3 Contra Costa County Office of the County Counsel  
1025 Escobar Street, Third Floor  
4 Martinez, CA 94553  
Telephone: (925) 655-2200  
5 Facsimile: (925) 655-2263  
E-mail: kurtis.keller@cc.cccounty.us

6 Respondents COUNTY OF CONTRA COSTA, et al.

7 NICKI CARLSEN (State Bar No. 151222)  
8 MEGAN AULT (State Bar No. 324651)  
KALINA ZHONG (State Bar No. 347019)  
9 ALSTON & BIRD LLP  
333 South Hope Street, 16th Floor  
10 Los Angeles, CA 90071-1410  
Telephone: (213) 576-1000  
11 Facsimile: (213) 576-1100  
E-mail: nicki.carlsen@alston.com  
12 megan.ault@alston.com  
kalina.zhong@alston.com

13 Real Party in Interest PHILLIPS 66 COMPANY (*erroneously sued as Phillips 66*)  
14

15 **SUPERIOR COURT OF THE STATE OF CALIFORNIA**

16 **COUNTY OF CONTRA COSTA**

17 COMMUNITIES FOR A BETTER  
ENVIRONMENT and CENTER FOR  
18 BIOLOGICAL DIVERSITY,

19 Petitioners,

20 v.

21 COUNTY OF CONTRA COSTA, BOARD OF  
SUPERVISORS OF COUNTY OF CONTRA  
22 COSTA; CONTRA COSTA COUNTY  
DEPARTMENT OF CONSERVATION AND  
23 DEVELOPMENT; and DOES 1-2,

24 Respondents.

25  
26 PHILLIPS 66, a Texas corporation and DOES  
21-40, Inclusive,

27 Real Party in Interest.

Case No. CIVMSN22-1080

[Assigned for all purposes to the Honorable  
Edward G. Weil - Dept. 39]

(California Environmental Quality Act)

**DECLARATION OF LASHUN CROSS IN  
SUPPORT OF PHILLIPS 66  
COMPANY'S MOTION FOR ORDER  
ALLOWING OPERATION OF RODEO  
RENEWED PROJECT**

[Code Civ. Proc., §§ 1085, 1094.5, California  
Environmental Quality Act, Pub. Resources  
Code, §§ 21000 *et seq.*]

Petition Filed: June 7, 2022  
Trial Date: June 28, 2023



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1. I am Principal Planner of the Contra Costa County (“County”) Department of Conservation and Development. I served as the lead planner in the land use permitting and Environmental Impact Report (“EIR”) preparation process for the Rodeo Renewed Project (“Project”). I make this declaration in support of Real Party in Interest Phillips 66 Company’s Motion for Order Allowing Operation of the Rodeo Renewed Project. I have personal knowledge of the facts set forth in this declaration and if called as a witness, could and would testify competently to them.

3. The Statement of Decision states:

4. It is my understanding that the Project has never been expected to receive and will not be receiving feedstocks from the NuStar facility. The NuStar facility does transport approximately 12,000 barrels per day of pretreated feedstocks via pipeline to the Phillips 66 Rodeo facility for the separate Unit 250 operation, which is not part of the Project.

6. It is my continued understanding that none of the modes of transportation identified

1 in Paragraph 5, above, and listed in Table 3-2 of the EIR bear a connection or relationship to the  
2 NuStar facility.

3 7. Based on my review of the County's files, the EIR's description of the Project's  
4 transportation sources as shown on Table 3-2 of the EIR remains accurate, and there is nothing in the  
5 County's files that would indicate there will be sourcing of product for the Project from the NuStar  
6 facility. Based on my review of the County's files, the only inputs from the NuStar facility to the  
7 Rodeo facility consist of the above-referenced approximately 12,000 barrels per day of pretreated  
8 feedstocks being delivered to Unit 250 via pipeline, which is not part of the Project.

9 8. Based on the foregoing and the evidence in the County's files, I continue to understand  
10 the changes to the NuStar facility to be unrelated to the Project and understand that the Project will  
11 in no way rely on the NuStar facility for any portion of its feedstocks or in any other capacity.

12 9. **Exhibit A** is a true and correct copy of the Project's Odor Prevention and Management  
13 Plan ("OPMP"). Exhibit A was submitted to the County on March 29, 2022, and is on file with the  
14 County. I am informed and believe that Phillips 66 will abide by the provisions of the OPMP.

15 I declare under penalty of perjury under the laws of the State of California that the foregoing  
16 is true and correct.

17 Executed this 31st day of August, 2023, at Martinez, California.

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21 Lashun Cross  
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# EXHIBIT A



## **Rodeo Renewed Odor Prevention and Management Plan**

**Date:** \_\_\_\_\_



## **Table of Contents**

### Table of Contents

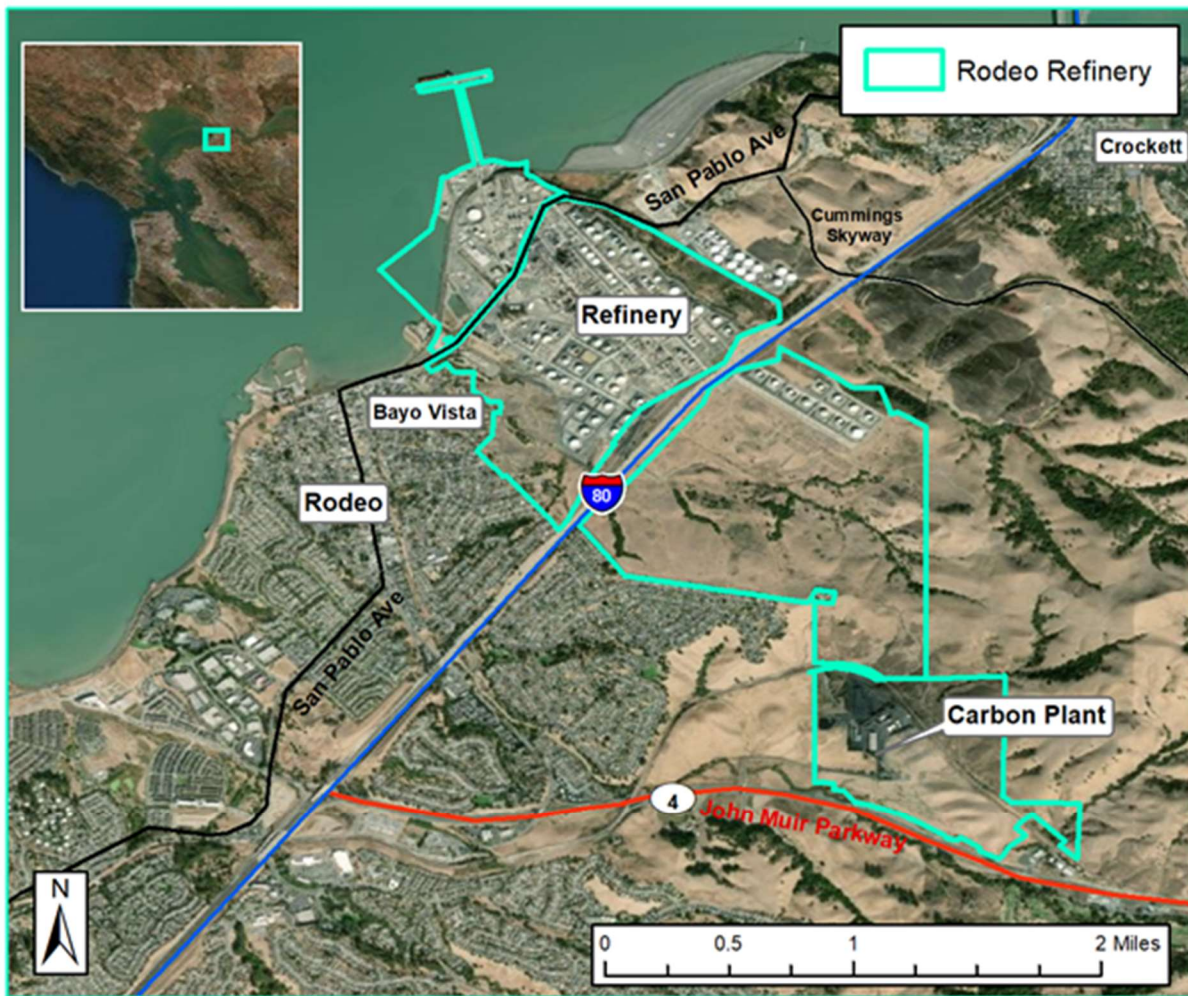
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## 1.0 Introduction

As shown in Figure 1-1, the Rodeo Refinery comprises approximately 1,100 acres of land, but the Rodeo Site is the 495-acre, developed portion of the property northwest of Interstate 80. The remaining portion of the Rodeo Refinery, southeast of I-80, consists of a tank farm and undeveloped land. The Rodeo Site is bordered by San Pablo Bay on the north and west, Interstate 80 on the southeast, the NuStar Energy tank farm on the northeast, and the Bayo Vista residential area of Rodeo to the southwest.

**Figure 1-1 Rodeo Refinery and Vicinity**



*Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community*

## 1.1 Background

The objective of the Rodeo Renewed project is to modify certain existing facilities and install new essential supporting facilities (e.g., feedstock pretreatment, etc.) to allow receipt and processing of a variety of renewable feedstocks, such as used cooking oil (UCO), international waste Fat Oil & Grease (FOG), beef tallow, soybean oil, etc. for producing renewable fuels.



Phillips 66 is planning to utilize as much existing equipment and infrastructure as possible for receiving, transferring, and storing future feedstocks and products. The project also includes a new renewable feedstock pretreatment facility unit (PTU) as an element of the Rodeo Renewed Project.

The current Phillips 66 Rodeo refinery has two existing hydrocrackers (Units 240 and 246) that will be converted for producing renewable naphtha, renewable diesel, and renewable jet fuel with minimal modifications.

Environmentally-responsible construction and operation, which preserves the natural characteristics and environmental features, is a primary objective of the project design. The project will comply with all federal and local environmental, health, and safety regulations and will incorporate good engineering practice and operation/maintenance policies and procedures to minimize environmental emissions and discharges.

**Figure 1-2. Rodeo Site Plot Plan and Project Equipment.**



## 1.2 Purpose of the Odor Management Plan

This Odor Management Plan will become an integrated part of daily operations at the Rodeo Renewed Facility (“Facility”), to effect diligent identification and remediation of any potential odors generated by the Facility. The purpose of this plan is to outline procedures that facility personnel shall use to address odor issues, facility wide.

The odor management plan will include continuous evaluation of the overall system performance, identifying any trends to provide an opportunity for improvements to the plan, and updating the odor management and control strategies as necessary.

## 2.0 Design Considerations for Odor Management

The first step in the process of controlling odors is designing active odor control measures into the facility. Techniques that can be used to reduce odor generation including reduction of volatile organic compounds



(VOCs) and odor generation by covering appropriate units with closed sealed covers, using fixed roof or floating roof storage tanks, reducing fugitive emissions, controlling and mitigating system upsets, and using scrubbing and incineration systems for vent gas streams.

The main areas of focus are the areas where the renewable feedstocks are first unloaded from rail and marine vessels to Tank 100 (TK-100) and at the feedstock Pretreatment Unit (PTU).

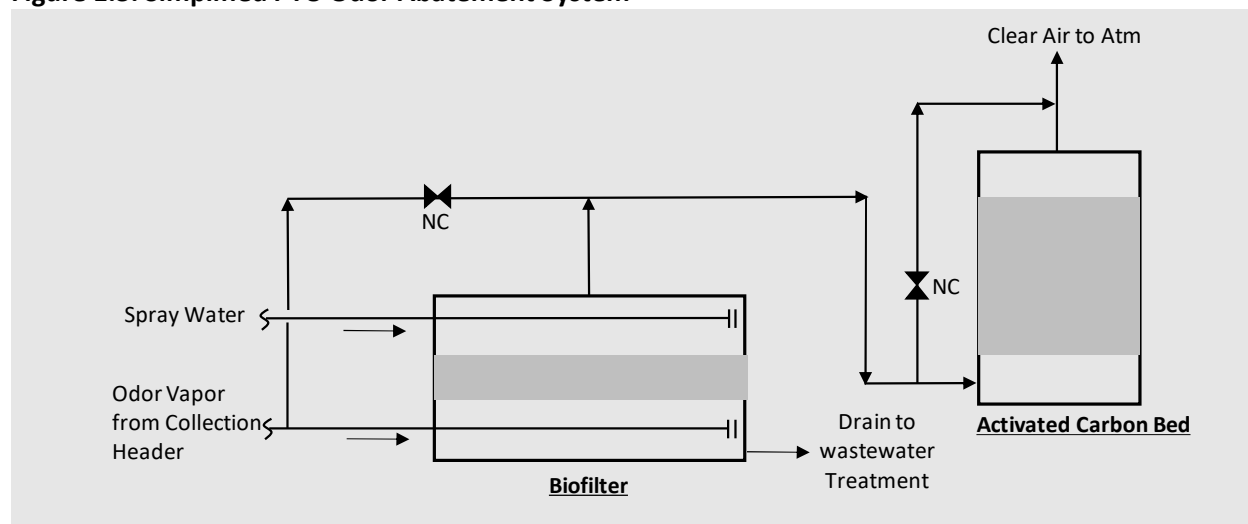
Rail unloading odor abatement includes a pipe header system tied to a new activated carbon canister system. The system will have redundant blowers that provide suction to the header ensuring that rail cars connected to the system will operate at slightly negative pressure, so potential odors are not released to the environment. The new activated carbon canister system contains two beds in series to ensure that odorous components are reduced to below detectable levels prior to release to the atmosphere. Any breakthrough that occurs on the first canister is controlled by the second canister and the saturated bed can be replenished without disrupting the odor abatement control of the rail unloading system. All rail cars undergoing preheating or offload operation will be continuously attached to the odor abatement system until all contents are offloaded.

Tank-100 is being repurposed to store renewable feedstocks with a fixed roof and new tank vent system that utilizes a nitrogen gas blanket. The TK-100 vent system operates either as in-breathing nitrogen when feeding the PTU or as out-breathing to the carbon canisters when receiving material into the tank. The blanket gas will be discharged via new blowers through activated carbon canisters for odor abatement prior to release to atmosphere. Both blowers and the carbon canisters have on-line spares. The TK-100 vent system is designed with push-pull pressure control that can be set to operate at a slight negative pressure. This ensures that no untreated odor is released to the atmosphere. The carbon canisters are designed with two beds in series to ensure that potential odorous components are controlled prior to release to the atmosphere. Full sparing of the carbon canisters will ensure that odor abatement of TK-100 will not be disrupted when one set of carbon beds is saturated and require replenishment.

The Odor Abatement System at the Pretreatment Unit includes an odor-vapor collection system and an odor-vapor treatment unit, which consists of a biofilter followed by an activated carbon adsorption bed. The biofilter reduces odorous constituents from the collected vapor and the residual components discharged from the biofilter will be further treated by the activated carbon bed. A simplified Block Flow Diagram for the Odor Abatement System is shown in Figure 1.3.



**Figure 1.3. Simplified PTU Odor Abatement System**



### Odor-Vapor Collection System

Using a suction fan/blower, the Odor Abatement System will draw vapors from the head space of all ambient liquid tanks/vessels in the PTU that could have potential odor-causing vapors. The system is designed for five air exchanges per hour of head space volume to effectively prevent the emission of odorous vapors to the atmosphere prior to treatment. All vessels and tanks directly venting to the odor abatement system will operate under a slight vacuum to ensure no odor is released to the atmosphere from an individual source. For the vessels operated under vacuum, the non-condensable vapor discharged from the vacuum ejectors and blowers will also be directed to the Odor Abatement System for odorous constituent removal.

### Biofilter

Azzuro's Biotrickling filter technology with activated carbon bed combined system has been selected as the odor management system at the PTU. The multi-stage Biotrickling reactor is sized and optimized to maximize the contact time with the highest contact area available in the market. This system has been utilized successfully in several market sectors including municipal wastewater units, agriculture and food processing units, biogas desulphurization processing solutions, petrochemical, rendering plants and cellulose processing facilities.

The heart of the system is the patented spacious wire pac media, which has a unique structural design with high surface area per volume ratio, with a demonstrated higher odor removal efficiency (>99%). It is compression resistant (does not shrink) and has an excellent resistance to low pH and organic solvents, thus allowing for a longer life with a 20-year warranty. This media creates an ideal substrate for the bacteria to colonize and flourish, and in doing so, creates the maximum surface area for bacteria to be in contact with the recovered air. This system also does not require water recirculation as it is able to maintain a favorable condition for the bacteria on the patented media.

The system has three stages to mitigate odorous components in the air flow:

- Stage 1 – inorganic odors are oxidized at the low pH by autotrophic bacteria



- Stage 2 – all other odorous components like fatty acids, and VOCs are biologically oxidized at a neutral pH by heterotrophic bacteria
- Stage 3 – the final stage consists of activated carbon treatment as a polishing stage

The PTU odor abatement includes two parallel biofilters that allow for one of the biofilters to be isolated for maintenance while the other is in operation. This redundancy ensures sources in the PTU are abated at all times in the event one biofilter is isolated for maintenance. The redundant activated carbon beds alone are sized to provide sufficient odor abatement for the entire PTU in the unlikely event both biofilters are offline at the same time. This will allow additional flexibility and redundancy if both biofilters are to be temporarily offline during maintenance periods without shutting down the complete system.

This technology was selected based on proven history of operating in multiple industries for over 20 years. The system is a product based on years of research and development and has proven superior performance, both in industrial and municipal applications.

#### **Activated Carbon Adsorption Bed**

An activated carbon adsorption bed is a proven technology for removing odorous constituents from vapor streams. Activated carbon beds alone are designed to be sufficient for odor abatement; however, the proposed 2-stage system with biofilter and activated carbon bed provides a robust solution for odor abatement during steady state operations and maintenance. During normal operation when both biofilters are operational, the carbon polishing stage has very minimal adsorption loading. This extends the useful life of the carbon adsorption bed for several years before replenishment is required, thereby reducing the generation of non-hazardous waste.

### **3.0 Odor Monitoring Program**

The odor monitoring program described below has been designed to provide guidance for the proactive identification and documentation of odors through the utilizing of self-inspections and odor compliant investigations. In addition, this program outlines the general methods by which odor sources can be identified and resolved.

#### **3.1 Identifying the Presence of Odor**

The first step in the process of controlling odors is to determine if the odors are present. This is done through routine employee observations, self-inspections, and odor complaint investigations.

##### **Routine Employee Observations**

When any on-site facility employee detects an odor that has sufficient intensity or volume that it could lead to detection off-site, it will be reported to Shift Supervision to investigate to determine the source of the odors. Once the source of the odors are determined, the refinery staff will respond to mitigate the odor source and restore the area to normal operations. Such on-site investigation, reporting, and remediation of odors are inherent components of the site's standard operating procedures.

##### **Self-Inspection**

The primary objective of this method is to identify and mitigate odors from the facility before the odors can result in off-site migration. This is accomplished through routine operational self-inspections. The self-



inspection will be performed at random times with daily and weekly variability until meaningful trend data is collected to ensure that trending data is not biased by a pattern in self-inspection.

### **Odor Complaint Investigation**

Phillips 66 strives to be a good neighbor and a contributor to the local community. All odor complaints received by the facility will be investigated as soon as is practical within the confines of proper safety protocols and site logistics. The goal of the investigation will be to determine if an odor originates from the facility and, if so, to determine the specific source and cause of the odor, and then to remediate the odor. Upon receipt of an odor complaint, the Facility's REOP-11-OPS EMERGENCY - Odor Complaint Investigation and CWS Notification Requirements procedure will be followed.

### **3.2 Odor Management**

Odor management and relief system management are inter-related. Odor management, for the purposes of this plan, will be the temporary measures employed during any facility maintenance activity that has the potential to generate odors.

Prior to any maintenance activities, pre-job planning and procedures are in place for the safe flushing and clean out of the equipment, vessel, piping, etc., prior to opening the system for maintenance work. This prevents any odor causing issues. Having several other programs such as Leak Detection and Repair (LDAR) programs, and Fenceline Monitoring also work in conjunction and support the overall odor management at the facility.



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I am employed in the County of San Francisco, State of California. I am over the age of 18 and not a party to the within action. My business address is Alston & Bird LLP, 560 Mission Street, STE 2100, San Francisco, CA 94105.

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☒ BY E-MAIL TRANSMISSION: via the electronic service address kaitlyn.schaefer@alston.com, the said document(s) were transmitted to the following email addressee(s).

Executed on September 1, 2023, at San Francisco, California.

---

Kaitlyn Schaefer

1 ***Communities for a Better Environment, et al. v. County of Contra Costa, et al.***

2 **Case No. N22-1080**

3  
4 **SERVICE LIST**

5  
6 Ellison Folk, Esq.  
7 Joseph D. Petta, Esq.  
8 SHUTE, MIHALY & WEINBERGER LLP  
9 396 Hayes Street  
10 San Francisco, California 94102  
Tel.: (415) 552-7272  
Fax: (415) 552-5816  
Email: folk@smwlaw.com  
petta@smwlaw.com

Attorneys for Petitioners  
COMMUNITIES FOR A BETTER  
ENVIRONMENT and CENTER FOR  
BIOLOGICAL DIVERSITY

11 Deborah A. Sivas, Esq.  
12 Stephanie L. Safdi, Esq.  
13 Matthew J. Sanders, Esq.  
14 STANFORD  
15 ENVIRONMENTAL LAW CLINIC  
16 Stanford Law School  
17 559 Nathan Abbot Way  
18 Stanford, CA 94305  
Tel: (650) 723-0325  
Fax: (650) 723-4426  
Email: dsivas@stanford.edu  
ssafdi@stanford.edu  
matthewjsanders@stanford.edu

Attorneys for Petitioners  
COMMUNITIES FOR A BETTER  
ENVIRONMENT and CENTER FOR  
BIOLOGICAL DIVERSITY

19 Shana Lazerow, Esq.  
20 Constance Cho, Esq.  
21 COMMUNITIES FOR A BETTER  
22 ENVIRONMENT  
23 6325 Pacific Blvd., Suite 300  
24 Huntington Park, CA 90255  
Tel: (323) 826-9771  
Fax: (323) 588-7079  
Email: slazerow@cbeal.org  
ccho@cbeal.org

Attorneys for Petitioner  
COMMUNITIES FOR A BETTER  
ENVIRONMENT

1  
2 Victoria Bogdan Tejeda, Esq.  
3 Hollin Kretzmann, Esq.  
4 CENTER FOR BIOLOGICAL DIVERSITY  
5 1212 Broadway, Suite 800  
6 Oakland, CA 94612  
7 Tel: (310) 365-9281  
8 Fax: (510) 844-7150  
9 Email: vbogdantejeda@biologicaldiversity.org  
10 hkretzmann@biologicaldiversity.org  
11  
12

Attorneys for Petitioner  
CENTER FOR BIOLOGICAL  
DIVERSITY

13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
Thomas L. Geiger, Esq.  
Kurtis C. Keller, Esq.  
CONTRA COSTA COUNTY OFFICE  
OF THE COUNTY COUNSEL  
1025 Escobar Street, Third Floor  
Martinez, CA 94553  
Tel: (925) 655-2200  
Fax: (925) 655-2263  
Email: kurtis.keller@cc.cccounty.us

Attorneys for Respondents  
COUNTY OF CONTRA COSTA, BOARD  
OF SUPERVISORS OF COUNTY OF  
CONTRA COSTA; and CONTRA COSTA  
COUNTY DEPARTMENT OF  
CONSERVATION AND DEVELOPMENT



**Kyle Oppliger**

Shore Terminals, NuStar Energy

NICKI CARLSEN (State Bar No. 151222)  
MEGAN AULT (State Bar No. 324651)  
KALINA ZHONG (State Bar No. 347019)  
ALSTON & BIRD LLP  
333 South Hope Street, 16th Floor  
Los Angeles, CA 90071-1410  
Telephone: 213-576-1000  
Facsimile: 213-576-1100  
E-mail: nicki.carlsen@alston.com  
megan.ault@alston.com  
kalina.zhong@alston.com

Real Party in Interest PHILLIPS 66 COMPANY (*erroneously sued as Phillips 66*)

**SUPERIOR COURT OF THE STATE OF CALIFORNIA**

**COUNTY OF CONTRA COSTA**

COMMUNITIES FOR A BETTER  
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v.

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PHILLIPS 66, a Texas corporation and DOES  
21-40, Inclusive,

Real Party in Interest.

Case No. CIVMSN22-1080

[Assigned for all purposes to the Honorable  
Edward G. Weil - Dept. 39]

(California Environmental Quality Act)

**DECLARATION OF KYLE OPPLIGER  
IN SUPPORT OF PHILLIPS  
66 COMPANY'S MOTION FOR  
ORDER ALLOWING OPERATION  
OF RODEO RENEWED PROJECT**

[Code Civ. Proc., §§ 1085, 1094.5, California  
Environmental Quality Act, Pub. Resources  
Code, §§ 21000 *et seq.*]

Petition Filed: June 7, 2022

Trial Date: June 28, 2023

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1. My name is Kyle Oppliger, and except where otherwise stated below, I have personal knowledge of the facts contained in this Declaration.
2. I am a Vice President of Shore Terminals LLC (“Shore Terminals”), which is an affiliate of NuStar Energy L.P. (“NuStar Energy”). I am also a Vice President of NuStar Energy’s general partner. Collectively, Shore Terminals and NuStar Energy are referred to below as “NuStar.”
3. I submit this Declaration in support of Real Party in Interest Phillips 66 Company’s (“Phillips 66”) Motion for Order Allowing Operation of the Rodeo Renewed Project in the matter known as Communities for a Better Environment et al. v. County of Contra Costa, et al., Case No. CIVMSN22-1080. I was informed by Phillips 66 that this matter involves a challenge to Contra Costa County’s (“County”) approval of a renewable fuels processing project proposed by Phillips 66 for its Rodeo facility, known as the Rodeo Renewed Project.
4. NuStar is a separate and independent business enterprise from Phillips 66, and NuStar is not affiliated with or controlled by Phillips 66.
5. Shore Terminals owns a terminal at 90 San Pablo Avenue, Crockett, California (the “Selby Terminal”). The Selby Terminal stores liquid fuels and feedstocks, which are received and transported by barge, pipeline, truck and rail. The Selby Terminal is adjacent to, but separate from and operated independently of, the Phillips 66’s Rodeo facility. My duties as an officer of Shore Terminals include, and I am therefore knowledgeable about, operation of the Selby Terminal.
6. In January 2021, NuStar received a building permit from the County to accommodate the ability to receive soybean oil and other renewable feedstocks at the existing NuStar rail spur at the Selby Terminal (the “Rail Spur”), as well as the installation of new piping, metering, and pumps. The new equipment facilitates the distribution of the received renewable feedstocks to a pipeline connecting the Selby Terminal to the P66 facility.
7. NuStar’s project authorized by the building permit was not designed to and did not involve any expansion of the Rail Spur. As such, for the purposes of the building permit application,




1 the capacity of the Rail Spur remained the same. For the purposes of the building permit application,  
2 NuStar accordingly used the then-current capacity of the Rail Spur of 45,000 barrels per day (“bpd”),  
3 which included the thirty-three (33) rail cars with a six-hundred and eighty (680) barrel maximum  
4 capacity making two (2) turns of the rail cars per day. The capacity of the Rail Spur remained the  
5 same after the completion of the project (i.e., after the changes to the rail rack to allow offloading and  
6 pipeline transport of pretreated renewable feedstocks) and remains the same today.

7 8. From April 2021 through July 2023, NuStar’s Selby Rail Spur received an average of  
8 less than 12,000 bpd of pretreated renewable feedstocks and NuStar has distributed those materials  
9 through the pipeline connected to the Phillips 66 Rodeo facility.

10 I declare under penalty of perjury under the laws of the State of California that the foregoing  
11 is true and correct.

12 Executed this 1st day of September, 2023, at Los Angeles, California.

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16 Kyle Oppliger (Sep 2, 2023 11:45 CDT)

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Kyle Oppliger

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I am employed in the County of San Francisco, State of California. I am over the age of 18 and not a party to the within action. My business address is Alston & Bird LLP, 560 Mission Street, STE 2100, San Francisco, CA 94105.

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*[Handwritten signature]*

---

Kaitlyn Schaefer

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3  
4 **SERVICE LIST**

5  
6 Ellison Folk, Esq.  
7 Joseph D. Petta, Esq.  
8 SHUTE, MIHALY & WEINBERGER LLP  
9 396 Hayes Street  
10 San Francisco, California 94102  
11 Tel.: (415) 552-7272  
12 Fax: (415) 552-5816  
13 Email: folk@smwlaw.com  
14 petta@smwlaw.com

Attorneys for Petitioners  
COMMUNITIES FOR A BETTER  
ENVIRONMENT and CENTER FOR  
BIOLOGICAL DIVERSITY

11  
12 Deborah A. Sivas, Esq.  
13 Stephanie L. Safdi, Esq.  
14 Matthew J. Sanders, Esq.  
15 STANFORD  
16 ENVIRONMENTAL LAW CLINIC  
17 Stanford Law School  
18 559 Nathan Abbot Way  
19 Stanford, CA 94305  
20 Tel: (650) 723-0325  
21 Fax: (650) 723-4426  
22 Email: dsivas@stanford.edu  
23 ssafdi@stanford.edu  
24 matthewjsanders@stanford.edu

Attorneys for Petitioners  
COMMUNITIES FOR A BETTER  
ENVIRONMENT and CENTER FOR  
BIOLOGICAL DIVERSITY

19  
20 Shana Lazerow, Esq.  
21 Constance Cho, Esq.  
22 COMMUNITIES FOR A BETTER  
23 ENVIRONMENT  
24 6325 Pacific Blvd., Suite 300  
25 Huntington Park, CA 90255  
26 Tel: (323) 826-9771  
27 Fax: (323) 588-7079  
28 Email: slazerow@cbeal.org  
ccho@cbeal.org

Attorneys for Petitioner  
COMMUNITIES FOR A BETTER  
ENVIRONMENT



1  
2 Victoria Bogdan Tejeda, Esq.  
3 Hollin Kretzmann, Esq.  
4 CENTER FOR BIOLOGICAL DIVERSITY  
5 1212 Broadway, Suite 800  
6 Oakland, CA 94612  
7 Tel: (310) 365-9281  
8 Fax: (510) 844-7150  
9 Email: vbogdantejeda@biologicaldiversity.org  
10 hkretzmann@biologicaldiversity.org  
11  
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27  
28

Attorneys for Petitioner  
CENTER FOR BIOLOGICAL  
DIVERSITY

8 Thomas L. Geiger, Esq.  
9 Kurtis C. Keller, Esq.  
10 CONTRA COSTA COUNTY OFFICE  
11 OF THE COUNTY COUNSEL  
12 1025 Escobar Street, Third Floor  
13 Martinez, CA 94553  
14 Tel: (925) 655-2200  
15 Fax: (925) 655-2263  
16 Email: kurtis.keller@cc.cccounty.us  
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Attorneys for Respondents  
COUNTY OF CONTRA COSTA, BOARD  
OF SUPERVISORS OF COUNTY OF  
CONTRA COSTA; and CONTRA COSTA  
COUNTY DEPARTMENT OF  
CONSERVATION AND DEVELOPMENT

**Jolie Rhinehart**  
Phillips 66 Company

NICKI CARLSEN (State Bar No. 151222)  
MEGAN AULT (State Bar No. 324651)  
KALINA ZHONG (State Bar No. 347019)  
ALSTON & BIRD LLP  
333 South Hope Street, 16th Floor  
Los Angeles, CA 90071-1410  
Telephone: (213) 576-1000  
Facsimile: (213) 576-1100  
E-mail: nicki.carlsen@alston.com  
megan.ault@alston.com  
kalina.zhong@alston.com

Real Party in Interest PHILLIPS 66 COMPANY (*erroneously sued as Phillips 66*)

**SUPERIOR COURT OF THE STATE OF CALIFORNIA**  
**COUNTY OF CONTRA COSTA**

COMMUNITIES FOR A BETTER  
ENVIRONMENT and CENTER FOR  
BIOLOGICAL DIVERSITY,

Petitioners,

v.

COUNTY OF CONTRA COSTA, BOARD OF  
SUPERVISORS OF COUNTY OF CONTRA  
COSTA; CONTRA COSTA COUNTY  
DEPARTMENT OF CONSERVATION AND  
DEVELOPMENT; and DOES 1-2,

Respondents.

PHILLIPS 66, a Texas corporation and DOES  
21-40, Inclusive,

Real Party in Interest.

Case No. CIVMSN22-1080

[Assigned for all purposes to the Honorable  
Edward G. Weil - Dept. 39]

(California Environmental Quality Act)

**DECLARATION OF JOLIE  
RHINEHART IN SUPPORT OF  
PHILLIPS 66 COMPANY'S MOTION  
FOR ORDER ALLOWING OPERATION  
OF RODEO RENEWED PROJECT**

[Code Civ. Proc., §§ 1085, 1094.5, California  
Environmental Quality Act, Pub. Resources  
Code, §§ 21000 *et seq.*]

Petition Filed: June 7, 2022  
Trial Date: June 28, 2023



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I, Jolie Rhinehart, declare as follows:

1. I am the Vice President for Phillips 66 Company (“Phillips 66”) and manage its San Francisco Refinery. The San Francisco Refinery includes the Rodeo facility in Contra Costa County (“County”) where the Rodeo Renewed Project is located. In my capacity as the Vice President, I am familiar with the Rodeo Renewed Project (“Project”), including the construction and proposed operations of the Project, along with the timing of those activities. I have personal knowledge of the facts set forth in this declaration, and if called to testify, I could and would competently testify to them.

2. Attached hereto as **Exhibit A** is a true and correct copy of Bay Area Air Quality Management District Authority to Construct for Permit Application No. 31157, Plant No. 21359 and a Letter of Exemption to Phillips 66, both issued on January 20, 2023.

3. I have reviewed the July 21, 2023 Statement of Decision issued by the Honorable Edward G. Weil in the *Communities for a Better Environment v. County of Contra Costa, et al.* (Case No. N22-1080) (“Statement of Decision”).

4. The Statement of Decision states:

“Given this evidence, the Court finds that the changes to the NuStar terminal increased its renewable feedstock capacity well beyond that which was required for Unit 250. Given the proximity in time and location between NuStar and Unit 250 projects and the Rodeo Renewed Project, the Court finds that the failure to consider the changes to the NuStar facility in the EIR at issue here was improper piecemealing. The Court notes that the record regarding NuStar is limited and with more information it may be possible to show that NuStar’s changes can be considered a separate project but on the current record the Court cannot make this finding.”

5. Unit 250 is a unit that processes pretreated renewable feedstocks. Since 2021, Unit 250 has received on an annualized basis approximately 12,000 barrels per day (“bpd”) of pretreated renewable feedstocks from a pipeline that connects to a third-party rail facility at the terminal referenced in paragraph 3, above. Both the rail facility and terminal, which are adjacent to Phillips 66’s Rodeo facility, are owned and operated by NuStar Energy L.P. (“NuStar”). NuStar is an entity

unrelated to Phillips 66 except via typical commercial contractual relationships, such as Phillips 66's purchase of pretreated renewable feedstock for its Unit 250 operations from NuStar's rail facility, discussed herein. On an average basis, Unit 250 does not process more than approximately 12,000 bpd of pretreated renewable feedstocks supplied from the NuStar rail facility. In addition, the pipeline from NuStar connects directly to Unit 250 feed tanks and to no other equipment at the Rodeo facility. Other than the pretreated renewable feedstocks pipeline, NuStar's rail facility is not connected to the Rodeo facility.

6. Phillips 66 has an agreement with NuStar for NuStar to supply pretreated renewable feedstocks from its rail facility to Phillips 66's Unit 250 feed tanks at the Rodeo facility via a pipeline.

7. The Rodeo facility is not receiving any materials from NuStar's rail facility other than the 12,000 bpd of pretreated renewable feedstocks that are being processed in Unit 250. In addition, the Rodeo Renewed Project premise is to process raw renewable feedstocks, not purchased pretreated feedstocks like those received at the NuStar rail facility. The Rodeo Renewed Project will not process pretreated feedstocks from the NuStar rail facility or any additional materials from the NuStar rail facility. Any capacity the NuStar facility has above the current 12,000 bpd is not planned to be used by the Rodeo facility or the Rodeo Renewed Project.

8. One of the key components of the Rodeo Renewed Project are the two Pretreatment Units (“PTUs”). The PTUs will process raw renewable feedstocks into pretreated feedstocks for processing in Units 240 and 246 (the main processing units that are part of Rodeo Renewed). Purchasing raw feedstocks is a vital element of the economics for the Rodeo Renewed Project as these raw feedstocks offer significantly improved economic incentives because pretreated renewable feedstocks are on the whole more costly to purchase than raw feedstocks. With the construction of the PTUs, the Rodeo facility will be able to purchase raw renewables feed and produce its own pretreated renewable feedstocks.

9. Phillips 66 is well underway with Rodeo Renewed construction with plans to complete construction and conversion from oil refining into a renewable energy facility in approximately March 2024.

1           10.     After conversion to renewables in March 2024, the Rodeo facility will no longer  
2 process crude oil into liquid transportation fuels necessary to meet California consumer demand.  
3 Presently the Rodeo facility produces approximately 6% of gasoline demand and 12% of diesel  
4 demand in the state of California.

5           11.     On or about September 30, 2023, Phillips 66 will be required to make critical business  
6 decisions regarding the construction of the Rodeo Renewed Project. On or about September 30, 2023,  
7 Phillips will decide whether or not to perform certain construction activities to commence the wind  
8 down of crude oil processing at the Rodeo facility. For example, on or about September 30, 2023, an  
9 additional crude oil storage tank and crude distillation unit are scheduled to be taken out of service,  
10 which would require the Rodeo facility to process crude oil at reduced rates through the end of the  
11 2023.

12           12.     At the end of 2023, the wind down process would continue with another critical point  
13 in the construction process—the “turnaround.” During the “turnaround” the Rodeo facility will stop  
14 processing petroleum feedstocks (i.e., shutdown hydrocrackers and crude oil processing) and complete  
15 the construction of the Rodeo Renewed Project. The “turnaround” is currently scheduled to start in  
16 January 2024 and to be completed by March 2024. This “turnaround” was planned during 2022 and  
17 2023 (approximately 12–18 months in advance of the “turnaround” construction work) due to the  
18 complexity and magnitude of the work along with contractor and worker availability. If this January–  
19 March 2024 “turnaround” is cancelled, then it would likely take another 6–9 months to reschedule  
20 another turnaround, and another 3 months to complete the “turnaround,” potentially resulting in a  
21 delay of a year or more to operate the Rodeo Renewed Project.

22           13.     I am informed and believe that the County will proceed expeditiously to conduct  
23 additional environmental review under the California Environmental Quality Act (“CEQA”) to  
24 address the issues raised in the Statement of Decision. However, I also believe that the County process  
25 will not conclude prior to September 30, 2023. It is also possible that the County process may not  
26 conclude with sufficient time to demonstrate to the Court that the County complied with the Court's  
27 ruling prior to the currently-scheduled “turnaround” start date of January 2024 for the Rodeo Renewed  
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1 Project. Thus, Phillips 66 is asking the Court for the ability to operate the Rodeo Renewed Project  
2 beginning in March 2024 at the conclusion of the construction process if the County needs additional  
3 time to take all necessary actions to comply with the Court's ruling.

4 14. Phillips 66 is seeking to avoid an outcome where the Rodeo facility could not operate  
5 as a crude oil refinery or a renewable processing facility. Phillips 66 would prefer to proceed with the  
6 Rodeo Renewed Project, but will have to consider all options, the decision of which is dependent on  
7 knowing in advance whether the Project may operate beginning in March 2024.

8 15. I have reviewed Exhibit A to the Cross Declaration submitted herewith, being the  
9 Project's Odor Prevention and Management Plan ("OPMP") submitted to the County on March 29,  
10 2022. If Phillips 66 is allowed to operate the Project, Phillips 66 agrees to abide by the provisions of  
11 the OPMP.

12  
13 I declare under penalty of perjury under the laws of the State of California that the foregoing  
14 is true and correct.

15 Executed this 31st day of August, 2023, at Los Angeles, California.

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19 Jolie Rhinehart  
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# EXHIBIT A



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

January 20, 2023

Phillips 66 - San Francisco Refinery  
1380 San Pablo Avenue  
Rodeo, CA 94572-1299

Attention: Wilma Dressen, Senior Environmental Consultant

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**Authority to Construct for Permit Application No. 31157, Plant No. 21359**

**Required  
Action**

Your Authority to Construct is enclosed. This Authority to Construct is not a Permit to Operate. **To receive your Permit to Operate you must:**

1. Complete the Start-up Notification portion of the Authority to Construct.
2. Send the Start-up Notification Form to the assigned Permit Engineer via e-mail, fax or mail **at least seven days** prior to operating your equipment. Forms can be found at <https://www.baaqmd.gov/forms/permits>

***Note:** Operation of equipment without sending the Start-up Notification to the District may result in enforcement action.*

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**Authorization  
of Limited Use**

The Authority to Construct authorizes operation during the start-up period from the date of initial operation indicated in your Start-up Notification until the Permit to Operate is issued, up to a maximum of 90 days. All conditions (specific or implied) included in this Authority to Construct will be in effect during the start-up period.

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**Contact  
Information**

If you have any questions, please contact your assigned Permit Engineer:

Jimmy Cheng, Senior Air Quality Engineer

**Tel:** (415) 749-5022    **Fax:** (415) 749-5030    **Email:** [jcheng@baaqmd.gov](mailto:jcheng@baaqmd.gov)

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# BAY AREA AIR QUALITY MANAGEMENT DISTRICT

## Authority to Construct

(This is not a Permit to Operate)

### Phillips 66 - San Francisco Refinery

1380 San Pablo Avenue, Rodeo, CA 94572-1299

is hereby granted an *Authority to Construct* for the following equipment:

Source Number	Equipment Description
S-11	U240_B-201 Heater, 108 MMBtu/hr
	Equipment above is subject to attached condition: 27654, 27811, 27659
S-12	U240 B-202 Heater, 42 MMBtu/hr
	Equipment above is subject to attached condition: 27654, 27811, 27659
S-13	U240_B-301 Heater, 194 MMBtu/hr, abated by A-113 U240 B-301 Heater SCR Unit
	Equipment above is subject to attached condition: 27654, 27811, 27659
S-22	U248_B-606 HEATER, 31 MMBtu/hr
	Equipment above is subject to attached condition: 27654, 27811, 27659
S-45	Heavy Gas Oil Feed Heater, abated by A-47 Selective Catalytic Reduction Unit for U240 HGO Feed Heater
	Equipment above is subject to attached condition: 27815, 22970, 27654, 27659
S-97	TANK NO. 100, 12474 thousand gallons, abated by A-626 Activated Carbon Vessel
	Equipment above is subject to attached condition: 27819, 27646
S-101	Tank 104 Storm Water Equalization, 5500 thousand gallons
	Equipment above is subject to attached condition: 27810
S-102	Tank 105 Storm Water Equalization, 5500 thousand gallons
	Equipment above is subject to attached condition: 27810
S-106	Tank 130 Stormwater Equalization, 10600 thousand gallons
	Equipment above is subject to attached condition: 27810
S-110	TANK NO. 155, 47,000 bbls
	Equipment above is subject to attached condition: 27646
S-111	TANK NO. 156, 100,000 bbls
	Equipment above is subject to attached condition: 27646
S-112	TANK NO. 157, 100,000 bbls
	Equipment above is subject to attached condition: 27646
S-113	TANK NO. 158, 101,000 bbls
	Equipment above is subject to attached condition: 27646
S-114	TANK NO. 159, 136,000 bbls
	Equipment above is subject to attached condition: 27646
S-122	TANK 167, 3.1 MM gallons
	Equipment above is subject to attached condition: 27816
S-125	Tank 170, 3024 thousand gallons
	Equipment above is subject to attached condition: 27787

Source Number	Equipment Description
S-126	Tank No. 172, 75,000 bbls
	Equipment above is subject to attached condition: 27820
S-135	Tank #200, 79,000 bbls, abated by A-7 Vapor Recovery System
	Equipment above is subject to attached condition: 27814, 23724, 27646
S-137	TANK NO. 202, 88,000 bbls, abated by A-7 Vapor Recovery System
	Equipment above is subject to attached condition: 27814, 23724, 27646
S-139	TANK NO. 204, 81,000 bbls, abated by A-7 Vapor Recovery System
	Equipment above is subject to attached condition: 27816, 23724
S-140	TANK #205, 54,000 bbls, abated by A-7 Vapor Recovery System
	Equipment above is subject to attached condition: 27816, 23724
S-150	TANK NO. 241, 79,000 bbls
	Equipment above is subject to attached condition: 27661
S-173	TANK #280, 134,000 bbls, abated by A-7, Vapor Recovery System,
	Equipment above is subject to attached condition: 23724, 27646
S-174	TANK #281, 134,000 bbls, abated by A-7, Vapor Recovery System
	Equipment above is subject to attached condition: 23724, 27646
S-175	TANK #284, 134,000 bbls, abated by A-7, Vapor Recovery System
	Equipment above is subject to attached condition: 23724, 27646
S-195	Tank 501, Sludge (API sediment, DAF float & sediment), 2,500 bbls
	Equipment above is subject to attached condition: 27653
S-254	TANK NO. 1001, 104,000 bbls
	Equipment above is subject to attached condition: 27657
S-256	Tank No. 1003, 104,000 bbls
	Equipment above is subject to attached condition: 27657
S-257	Tank No. 1004, 104,000 bbls
	Equipment above is subject to attached condition: 27657
S-261	TANK NO. 1010, 104,000 bbls
	Equipment above is subject to attached condition: 27823, 27646
S-296	C-1 FLARE, 6.6 MMBtu/hr pilot
	Equipment above is subject to attached condition: 18255
S-307	U240 UNICRACKING UNIT 240
	Equipment above is subject to attached condition: 27647, 27658
S-309	U248_UNISAR UNIT 248
	Equipment above is subject to attached condition: 27647
S-318	Unit 76
	Equipment above is subject to attached condition: 22549, 27658
S-322	U40_RAW MATERIALS RECEIVING
	Equipment above is subject to attached condition: 27658
S-324	324 U100_API OIL WASTEWATER SEPARATOR (with outlet channel cover), abated by A-53 Thermal Oxidizer for S-324
	Equipment above is subject to attached condition: 1440, 26069
S-334	Tank #107, 180,000 bbls



Source Number	Equipment Description
	Equipment above is subject to attached condition: 27813, 27646
S-338	U233 FUEL GAS CENTER, 7.5E6 cubic feet/hr
	Equipment above is subject to attached condition: 27657
S-339	U80_REFINED OIL SHIPPING UNIT
	Equipment above is subject to attached condition: 22968
S-340	TANK #108, 200,000 bbls
	Equipment above is subject to attached condition: 27824, 27646
S-341	TANK #208, 103,000 bbls
	Equipment above is subject to attached condition: 27821
S-342	TANK #209, 103,000 bbls
	Equipment above is subject to attached condition: 27822
S-352	Combustion Turbine (16.6 MW), 291 MMBtu/hr, abated by S-355 Supplemental Firing Duct Burners
	Equipment above is subject to attached condition: 27754, 18629, 27659
S-353	Combustion Turbine (16.6 MW), 291 MMBtu/hr, abated by S-356 Supplemental Firing Duct Burners
	Equipment above is subject to attached condition: 27754, 18629, 27659
S-354	Combustion Turbine (16.6 MW), 291 MMBtu/hr, abated by S-357 Supplemental Firing Duct Burners
	Equipment above is subject to attached condition: 27754, 18629, 27659
S-355	Supplemental Firing Duct Burners, 175 MMBtu/hr, abated by A-13 SCR/CO Converter Unit
	Equipment above is subject to attached condition: 27754, 18629, 27659
S-356	Supplemental Firing Duct Burners, 175 MMBtu/hr, abated by A-14 SCR/CO Converter Unit
	Equipment above is subject to attached condition: 27754, 18629, 27659
S-357	Supplemental Firing Duct Burners, 175 MMBtu/hr, abated by A-15 SCR/CO Converter Unit
	Equipment above is subject to attached condition: 27754, 18629, 27659
S-360	Mid-Barrel Tank 223, 110,000 bbls, abated by A-7 Vapor Recovery System
	Equipment above is subject to attached condition: 23724, 27646
S-381	Aeration Tank, Pact (F-201), 1.2 MM gallons
	Equipment above is subject to attached condition: 1440
S-382	Aeration Tank, Pact (F-202), 1.2 MM gallons
	Equipment above is subject to attached condition: 1440
S-383	Clarifier, F-203, 0.69 MM gallons
	Equipment above is subject to attached condition: 1440
S-384	Clarifier (F-204), 0.69 MM gallons
	Equipment above is subject to attached condition: 1440
S-385	Media Filter (F-271 to F-278), 420,000 gallons/hr
	Equipment above is subject to attached condition: 1440
S-386	PAC Regeneration Sludge Thickener (F-211), 44,000 gallons
	Equipment above is subject to attached condition: 1440
S-387	Wet Air Regeneration (P-202), 15 gpm
	Equipment above is subject to attached condition: 1440
S-390	F-248 Thickened Sludge Storage, 26.5 thousand gallons
	Equipment above is subject to attached condition: 1440
S-398	MP-30 Flare, 3.1 MMBtu/hr pilot

Source Number	Equipment Description
	Equipment above is subject to attached condition: 18255
S-400	Wet Weather Wastewater Sump, abated by A-40 Wet Weather Sump Vented Cover
	Equipment above is subject to attached condition: 1440
S-401	Dry Weather Wastewater Sump, abated by A-41 Dry Weather Sump Vented Cover
	Equipment above is subject to attached condition: 1440
S-425	Marine Terminal Berth M1, 2 permitted arms, abated by A-420 Thermal Oxidizer
	Equipment above is subject to attached condition: 27655
S-426	Marine Terminal Berth M2, 4 permitted arms, abated by A-420 Thermal Oxidizer
	Equipment above is subject to attached condition: 27655
S-434	U246 High Pressure Reactor Train
	Equipment above is subject to attached condition: 22970, 27647, 27658
S-437	Hydrogen Manufacturing Unit, abated by S-438 U110_H-1 Furnace (H2 Plant Reforming)
	Equipment above is subject to attached condition: 27658
S-438	U110_H-1 Furnace (H2 Plant Reforming), 250 MMBtu/hr, abated by A-46 Selective Catalytic Reduction Unit
	Equipment above is subject to attached condition: 27654, 27659
S-445	Tank 271, 189,000 bbls, abated A-7 Vapor Recovery System
	Equipment above is subject to attached condition: 27808, 23724, 27646
S-446	Tank 310 (ISOPENTANE), 1722 thousand gallons, abated by A-7 Vapor Recovery System
	Equipment above is subject to attached condition: 27808
S-447	Tank 311 (Isopentane), 1722 thousand gallons, abated by A-7 Vapor Recovery System
	Equipment above is subject to attached condition: 27808
S-448	Tank 1007 (Blendstock Receiving), 243,000 bbls
	Equipment above is subject to attached condition: 27809, 27646
S-449	TANK #285, 189,000 bbls, abated by A-7, Vapor Recovery System
	Equipment above is subject to attached condition: 27656, 23724, 27646
S-453	U236 Cooling Tower, 13,500 gpm
	Equipment above is subject to attached condition: 27812, 27660
S-455	U240 Cooling Tower, 33,000 gpm
	Equipment above is subject to attached condition: 27812, 27660
S-465	Unit 235 Sulfur Pit-Tank, 200 long ton/day, abated by S-1010 U235 Sulfur Recovery Unit
	Equipment above is subject to attached condition: 27817
S-503	Sulfur Storage Tank, 471 long ton/day, abated by S-1010 Sulfur Plant Unit 235
	Equipment above is subject to attached condition: 27818
S-504	Sulfur Degassing Unit, 400 long ton/day, abated by S-1010 Sulfur Plant Unit 235
	Equipment above is subject to attached condition: 27818
S-505	Sulfur Truck Loading Rack, 200 gpm sulfur, abated by S-1010 Sulfur Plant Unit 235
	Equipment above is subject to attached condition: 27818
S-506	Fixed Roof Tank 257, 80,000 bbls, abated by A-7, Vapor Recovery System,
	Equipment above is subject to attached condition: 23724, 27646
S-1007	U100-Dissolved Air Flotation Unit (with fixed roof), abated by: A-49 Thermal Oxidizer A-51 DAF Carbon Bed A-53 Thermal Oxidizer for S-324

Source Number	Equipment Description
	Equipment above is subject to attached condition: 1440
S-1008	U100_Primary Stormwater Basin
	Equipment above is subject to attached condition: 1440
S-1009	U100_Main Stormwater Basin
	Equipment above is subject to attached condition: 1440
S-1010	U235 Sulfur Recovery Unit, 200 long ton/day, abated by A-48 Sulfur Plant Tail Gas Treatment Plant
	Equipment above is subject to attached condition: 22970, 27818, 27817, 27648
S-599	<p>Sour Water Strippers and Amine Gas Treatment System, abated by Unit 237 Sulfur Treatment Unit (2 Trains), consisting of:</p> <p>Train #1: A-598 Thermal Oxidizer (B-201 Main Burner, B-202 Reduction Furnace, B-203 Oxidation Furnace, B-204 Auxiliary Burner, and E-205 Waste Heat Boiler, 7.4 MMBtu/hr) and A-599 SO<sub>2</sub> Scrubber (D-211 Venturi, D-212 Caustic Scrubber, D-213 Cold Stack)</p> <p>Train #2: A-600 Thermal Oxidizer (B-201 Main Burner, B-202 Reduction Furnace, B-203 Oxidation Furnace, B-204 Auxiliary Burner, and E-205 Waste Heat Boiler, 7.4 MMBtu/hr) and A-601 SO<sub>2</sub> Scrubber (D-211 Venturi, D-212 Caustic Scrubber, D-213 Cold Stack)</p>
	Equipment above is subject to attached condition: 27648, 27658
S-600	Pretreatment Unit (PTU), consisting of 3 trains, 80,000 bbls/day, abated by A-622 and A-624 Biofilters and A-623 and A-625 Carbon Adsorption Systems
	Equipment above is subject to attached condition: 27649, 27658
S-602	Filter Aid Storage Silos (9) and Truck Loading/Traffic, each abated by A-606 through A-614 Pulse Jet Dust Houses (9), 1,600 dscfm maximum each
	Equipment above is subject to attached condition: 27650
S-603	Polyethylene Removal Filter Aid Day Hoppers (4), abated by A-615 and A-618 Dust Filters (4), 665 dscfm maximum each
	Equipment above is subject to attached condition: 27651
S-605	Filter Aid Adsorption Day Hoppers (3), abated by A-619 and A-621 Dust Filters (3), 665 dscfm maximum each
	Equipment above is subject to attached condition: 27652
S-606	Spent Water Tank (at S-600 Pretreatment Unit), 98,100 gallons, abated by abated by A-598, Biofilter and A-599 Carbon Adsorption System
	Equipment above is subject to attached condition: 27649
S-612	DAFs (2), 17,000 gallons each (at S-600 Pretreatment Unit), abated by A-622 and A-624 Biofilters and A-623 and A-625 Carbon Adsorption Systems
	Equipment above is subject to attached condition: 27649
S-613	Process Tanks (3), 4,700 gallons, 128,388 gallons and 528 gallons (at S-600 Pretreatment Unit), abated by A-622 and A-624 Biofilters and A-623 and A-625 Carbon Adsorption Systems
	Equipment above is subject to attached condition: 27649
S-616	Collection Tanks (2), 21,134 gallons each (at S-600 Pretreatment Unit)
	Equipment above is subject to attached condition: 27649

Source Number	Equipment Description
A-598	Thermal Oxidizer (B-201 Main Burner, B-202 Reduction Furnace, B-203 Oxidation Furnace, B-204 Auxiliary Burner, and E-205 Waste Heat Boiler, 7.4 MMBtu/hr)
	Equipment above is subject to attached condition: 27648
A-599	SO2 Scrubber (D-211 Venturi, D-212 Caustic Scrubber, D-213 Cold Stack)
	Equipment above is subject to attached condition: 27648
A-600	Thermal Oxidizer (B-201 Main Burner, B-202 Reduction Furnace, B-203 Oxidation Furnace, B-204 Auxiliary Burner, and E-205 Waste Heat Boiler, 7.4 MMBtu/hr)
	Equipment above is subject to attached condition: 27648
A-601	SO2 Scrubber (D-211 Venturi, D-212 Caustic Scrubber, D-213 Cold Stack)
	Equipment above is subject to attached condition: 27648
A-606	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-607	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-608	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-609	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-610	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-611	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-612	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-613	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-614	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-615	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27651
A-616	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27651
A-617	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27651
A-618	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27651
A-619	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27652
A-620	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27652
A-621	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27652



Source Number	Equipment Description
A-622	Biofilter
	Equipment above is subject to attached condition: 27649
A-623	PTU FOG Carbon Adsorption, 2,200 scfm maximum
	Equipment above is subject to attached condition: 27649
A-624	Biofilter
	Equipment above is subject to attached condition: 27649
A-625	PTU FOG Carbon Adsorption, 2,200 scfm maximum
	Equipment above is subject to attached condition: 27649
A-626	Activated Carbon Vessel, 2 in parallel, while 2 are connected on standby
	Equipment above is subject to attached condition: 27819

*Issue date:* 1/20/2023  
*Expiration date:* 1/20/2025

Approved by



for

SHARON L. LANDERS  
INTERIM EXECUTIVE OFFICER / APCO



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. All Sources Facility-Wide**

**Condition No. 20773FW**

**Plant No. 21359**

**Application No. 31157**

**CONDITION 20773, TANKS EXEMPT FROM REGULATION 8, RULE 5**

This condition applies to tanks that are exempt from Regulation 8, Rule 5, Storage of Organic Liquids, due to the exemption in Regulation 8-5-117 for storage of organic liquids with a true vapor pressure of less than or equal to 25.8 mm Hg (0.5 psia).

1. Whenever the type of organic liquid in the tank is changed, the owner/operator shall verify that the true vapor pressure at the storage temperature is less than or equal to 25.8 mm Hg (0.5 psia). The owner/operator shall use Lab Method 28 from Volume III of the District's Manual of Procedures, Determination of the Vapor Pressure of Organic Liquids from Storage Tanks. For materials listed in Table 1 of Regulation 8, Rule 5, the owner/operator may use Table 1 to determine vapor pressure, rather than Lab Method 28. If the results are above 25.8 mm Hg (0.5 psia), the owner/operator shall report non-compliance in accordance with Standard Condition I.F and shall submit an application to the District for a new permit to operate for the tank as quickly as possible. [Basis: 8-5-117 and 2-6-409.2]
2. The results of the testing shall be maintained in a District-approved log for at least five years from the date of the record, and shall be made available to District staff upon request. [Basis: 2-6-409.2]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. All Sources Facility-Wide**

**Condition No. 27646FW**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance) - Phillips 66 Rodeo Renewed Fuels Project.

General:

1. a.
  - The owner/operator shall ensure that all of the following sources are not used in the process of unloading renewable feedstock, producing renewable fuels, loading renewable fuels, handling waste related to renewable fuels production or processing or any other activities associated with the Rodeo Renewed project: S-2, S-3, S-4, S-5, S-7, S-9, S-10, S-15, S-16, S-17, S-18, S-19, S-20, S-21, S-31, S-43, S-44, S-133, S-300, S-304, S-305, S-306, S-308, S-319, S-336, S-337, S-370, S-371, S-372, S-432, S-433, S-435, S-436, S-452, S-457, S-458, S-462, and S-463. Prior to operating any of the sources above with the renewable fuels process, the owner/operator shall submit an application to the Air District's Engineering Division for review and receive approval from the Air District.  
(Basis: Regulation 2-1-403 Permit Conditions)
- 1b.
  - The owner/operator shall ensure that all of the following sources that are in operation are not used in the process of unloading renewable feedstock, producing renewable fuels, loading renewable fuels, handling waste related to renewable fuels production or processing or any other activities associated with the Rodeo Renewed project: S-98, S-100, S-107, S-115, S-123, S-124, S-128, S-129, S-134, S-136, S-138, S-149, S-151, S-168, S-169, S-171, S-177, S-178, S-180, S-182, S-183, S-184, S-186, S-191, S-192, S-194, S-209, S-239, S-255, S-258, S-259, S-286, S-287, S-289, S-293, S-343, S-380, S-392S-427, S-428, S-429, S-440, S-444, S-446, S-447, S-507 and/or any other sources that are in operation but is not part of Application 31157. Prior to operating any of the sources above with the renewable fuels process, the owner/operator shall submit an application to the Air District's Engineering Division for review and receive approval from the Air District.  
(Basis: Regulation 2-1-403 Permit Conditions)
2. The owner/operator of Pretreatment Unit (S-600), Unicracking U240 (S-307) and High Pressure Reactor Train U246 (S-434) shall not process any crude oil feedstock and/or any liquid petroleum based feedstock at these sources. (Basis: Regulation 2-1-403 Permit Conditions)

*Documentation:*

The following permit conditions will be used to verify permitting actions/determinations and assumptions used for issuance of the Authority to Construct, which is based on preliminary information.

3. Prior to the issuance of the permit to operate, the owner/operator shall submit the following items to the Air District's Engineering Division (each referencing Permit Application #31157, Permit Condition 27646, Part 3):
  - Final as-built fugitive component counts including new and replaced components of all sources in Condition 27658 in the Rodeo Renewed Project
  - Final design drawings and specification for S-97 (Tank 100) and Activated Carbon Vessel (A-626 – 4 in parallel)
  - Final design drawings and specification for Biofilter (A-622) and Activated Carbon Vessel (A-623), and/or Biofilter (A-624) and Activated Carbon Vessel (A-625)
  - Final design drawings and specification for A-598 through A-601 (S-599 STU Unit)
  - Final as-built Process Flow Diagrams and/or block flow diagrams for all changes associated with the Rodeo Renewed Project, including but not limited to the blending operation at Unit 76 and U 80
  - Subsequent revisions to product Safety Data Sheet (SDS) (Renewable Diesel, Propane, Naphtha, etc.).



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. All Sources Facility-Wide**

**Condition No. 27646FW**

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**Application No. 31157**

- Submit a Device Data Update Form (Form DDU) for all shut down sources  
(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase)

*New Source Performance Standards (NSPS) and National Emissions Standards for Hazardous Air Pollutants (NESHAP) Applicability Determination and Compliance:*

4. The owner/operator of S-107, S-133, S-139, S-140, S-168, S-182, S-324, S-1007, A-49 and/or A-51 shall determine the facility's total annual benzene (TAB) quantity from facility waste within 90 days of achieving the maximum processing rate of 69,000 bpd, but no later than 180 days after the startup of S-307 (U240) and S-434 (U246) regardless of the capacity achieved. This determination shall be performed while S-460 (U250) is in operation at the same time. The total annual benzene quantity shall be determined in accordance with 40 CFR Part 61, Subpart FF, §61.355. The results shall be submitted to the Air District's Engineering Division no later than 30 days from the date of the analysis or any data used for the analysis as required in 40 CFR 61.357. If the TAB report is calculated to be less than 10 Megagram (11 tons) per year, the owner/operator shall notify the Air District to confirm the report, to reclassify the facility as exempt from the control standards of 40 CFR 51, Subpart FF, and to confirm compliance with any other applicable regulatory requirements prior to issuance of the permit to operate. If the analysis is greater than or equal to 10 Megagram (11 tons) per year, the owner/operator shall continue to comply with control standards as provided in 40 CFR 61.355, Subpart FF. The TAB shall be updated as required in 40 CFR 61.355. The reports shall be submitted as required in 40 CFR 61.355, Subpart FF. The owner/operator shall submit a Title V significant revision application in order to address any applicable regulatory changes based on the TAB determination.  
(Basis: 40 CFR Part 61, Subpart FF, §61.340 - Applicability)
5. The owner/operator of S-101, S-102, S-106, S-324, S-381 through S-387, S-390, S-400, S-401, and/or S-1007 shall determine the designation of process wastewater streams (Group 1 or Group 2) in accordance with 40 CFR §63.132 and 63.2485(c) and demonstrate compliance with Table 7 of 40 CFR Part 63, Subpart FFFF, within 90 days of achieving maximum processing capacity of 69,000 bpd, but no later than 180 days after the startup of S-307 (U240) and S-434 (U246). This determination shall be performed while S-460 (U250) is in operation at the same time. The analysis results that include the sampling test data shall be submitted to the Air District's Engineering Division no later than 60 days from the date of the analysis. After the analysis is complete the Air District will confirm compliance with any applicable regulations and add any associated additional conditions as necessary to maintain compliance with any applicable regulatory requirements prior to issuance of the permit to operate.  
(Basis: 40 CFR Part 63, Subpart FFFF, §63.2485 – Requirements for Wastewater Streams)
6. The owner/operator of S-11, S-12, S-13, S-22, S-45, and S-438 shall demonstrate that fuel gas combusted at these sources qualifies as an "other gas 1 fuel," as defined in 40 CFR §63.7575, in accordance with procedures established in 40 CFR §63.7521(f) through (i) and according to the frequency listed in 40 CFR §63.7575(c) and maintain records of the results of the testing as outlined in 40 CFR §63.7555(g). The determination shall be submitted to the Air District's Engineering Division no later than 60 days from the date of the analysis. If the initial sample does not qualify as an "other gas 1 fuel," sources listed in this Part are not considered units designed to burn gas 1 subcategory and shall be in compliance with the emission and operating limits for the appropriate subcategory in Subpart DDDDD. After sampling is complete the Air District will confirm compliance with any applicable regulations and add any associated additional conditions as necessary to maintain compliance with any applicable regulatory requirements prior to issuance of the permit to operate.  
(Basis: 40 CFR 63, Subpart DDDDD, §63.7530(g) – Initial Fuel Speciation Analysis, Recordkeeping).

*Initial Compliance Demonstration:*





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7. The owner/operator shall conduct initial compliance source test on API Separator (S-324)/ Thermal Oxidizers (A-53), DAF Unit (S-1007)/ Thermal Oxidizers (A-49) and/or Carbon Adsorption System (A-51) to demonstrate compliance with Permit Condition #26069 Part 1 and #1440, Parts 7b and 7c, respectively. The owner/operator shall notify the Air District's Source Test Section and Engineering Division in writing of the source test protocols and projected test dates at least 30 days in advance of the initial compliance source test such that the Air District may observe during testing. The results shall be delivered to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of the test. Initial compliance source test shall be conducted within 90 days after achieving 80% of 69,000 bpd, but no later than 180 days after the startup of the Rodeo Renewed Project and shall only use Air District approved source test methods and procedures.  
(Basis: Regulation 2-1-403 Compliance Demonstration)

*Material Speciation Lab Analyses:*

8. a.
- Within 180 days of the startup of S-600 Pretreatment Unit (first two trains) of the Rodeo Renewed Project, the owner/operator shall conduct sampling and testing to determine the level of air toxics (Toxic Air Contaminant, (TAC)) in feed and product streams (including renewable gasoline, renewable jet, renewable diesel and renewable naphtha) for the following process units: S-600 Pretreatment Unit (PTU-first two trains), Unicracking U240 (S-307) and High Pressure Reactor Train U246 (S-434), and Unisar Unit 248 (S-309). Sampling and testing shall be performed under normal "as found" operations for each feedstock (including Soybean Oil, Corn Oil, Canola Oil, Tallow, Used Cooking Oil (UCO), Inedible Corn Oil, Fat Oil Grease (FOG), other Vegetable-Based Oils and/or blended feedstocks. Sampling and testing shall be completed using ASTM D6730 light liquid and gas streams, or D2425 for heavy liquid streams, unless alternative sampling and testing methods are approved by the Air District. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
    - i. Material speciation lab results and/or testing methods used for feed and product streams;
    - ii. Type of feedstock used during the sampling and testing;
    - iii. Feed/Processing Rate;
    - iv. Reference to Permit Application #31157, Permit Condition 27646, Part 8a;
    - v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
    - vi. The owner/operator of the above sources shall submit the revised TAC emissions calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher or contain any different TACs than TAC calculations approved in the Rodeo Renewed Project at the time of the issuance of the Authority to Construct. Exceeding any of the emission rates in the calculations approved at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements with the higher emissions rates and different TAC speciation.
- (Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

8b.



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. All Sources Facility-Wide**

**Condition No. 27646FW Plant No. 21359**

**Application No. 31157**

- Within 180 days of the startup of S-600 Pretreatment Unit (3<sup>rd</sup> train) of the Rodeo Renewed Project, the owner/operator shall conduct sampling and testing to determine the level of air toxics (Toxic Air Contaminant, (TAC)) in feed and product streams (including renewable gasoline, renewable jet, renewable diesel and renewable naphtha) for the following process units: S-600 Pretreatment Unit (PTU-all three trains), Unicracking U240 (S-307) and High Pressure Reactor Train U246 (S-434), and Unisar Unit 248 (S-309). Sampling and testing shall be performed under normal "as found" operations for each feedstock (including Soybean Oil, Corn Oil, Canola Oil, Tallow, Use Cooking Oil (UCO), Inedible Corn Oil, Fat Oil Grease (FOG), other Vegetable-Based Oils and/or blended feedstocks). Sampling and testing shall be completed using ASTM D6730 light liquid and gas streams, or D2425 for heavy liquid streams, unless alternative sampling and testing methods are approved by the Air District. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
  - i. Material speciation lab results and/or testing methods used for feed and product streams;
  - ii. Type of feedstock used during the sampling and testing;
  - iii. Feed/Processing Rate;
  - iv. Reference to Permit Application #31157, Permit Condition 27646, Part 8b;
  - v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project; and
  - vi. The owner/operator of the above sources shall submit the revised TAC emissions calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions are found to be higher or contain any different TACs than the approved calculations in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

*Wastewater Lab Analyses:*

- 9. a.
  - Within 180 days of the startup of S-600 Pretreatment Unit (first two trains) of the Rodeo Renewed Project, the owner/operator shall conduct sampling and testing to determine wastewater stream (influent to S-381/S-382 PACT) organic and TAC speciation under maximum or near maximum capacity (80% of 80,000 bpd) or normal "as found" operation using the following Air District approved test methods, unless alternative sampling and testing methods are approved by the Air District: EPA Method 350.1, EPA Method 1664A, SM 4500-S2, EPA Method 420.4, and EPA Method 624.1. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
    - i. Material speciation lab results and/or testing method used for wastewater streams;
    - ii. Type of feedstock used during the sampling and testing;
    - iii. Feed/Processing Rate;



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- iv. Reference to Permit Application #31157, Permit Condition 27646, Part 9a;
- v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
- vi. The owner/operator of the above sources shall submit the revised TAC emission calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher or contain any different TACs than the calculations approved in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-1-403 Permit Conditions, Regulation 2-5 toxics)

9b.

- Within 180 days of the startup of S-600 Pretreatment Unit (3<sup>rd</sup> train) of the Rodeo Renewed Project, the owner/operator shall conduct sampling and testing to determine wastewater stream (influent to S-381/S-382 PACT) organic and TAC speciation under maximum or near maximum capacity (80% of 80,000 bpd) operation using the following Air District approved test methods, unless alternative sampling and testing methods are approved by the Air District: EPA Method 350.1, EPA Method 1664A, SM 4500-S2, EPA Method 420.4, and EPA Method 624.1. If within 180 days, if the owner/operator of S-600 is not operating at maximum or near maximum capacity (80% of 80,000 bpd), then the owner/operator shall perform sampling and testing at the interim (as found) operating capacity. Within 90 days from the date when the maximum or near maximum capacity (80% of 80,000 bpd) is attained, the owner/operator shall repeat the sampling and testing at this maximum or near maximum capacity. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
  - i. Material speciation lab results and/or testing method used for wastewater streams;
  - ii. Type of feedstock used during the sampling and testing;
  - iii. Feed/Processing Rate;
- iv. Reference to Permit Application #31157, Permit Condition 27646, Part 9b;
- v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
- vi. The owner/operator of the above sources shall submit the revised TAC emission calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher or contain any different TACs than the calculations approved in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements.



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(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

10. a

- Within 180 days of the startup of S-600 Pretreatment Unit (first two trains) of the Rodeo Renewed Project, the owner/operator shall conduct sampling and testing to determine the amine and sour water influent streams (effluent of S-599 Amine/Sour Water Strippers) organic and TAC speciation under maximum or near maximum capacity (80% of 80,000 bpd) or normal “as found” operation using the following Air District approved test methods, unless alternative sampling and testing methods are approved by the Air District: SW 8260B, Hach TNT 832, UOP 209-00B, EPA Method 610. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
  - i. Material speciation lab results and/or testing method used for amine and sour water streams;
  - ii. Type of feedstock used during the sampling and testing;
  - iii. Feed/Processing Rate;
  - iv. Reference to Permit Application #31157, Permit Condition 27646, Part 10a;
  - v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
  - vi. The owner/operator of the above sources shall submit the revised TAC emissions calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher or contain any different TACs than the calculations approved in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the ACor finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

10b.

- Within 180 days of the startup of S-600 Pretreatment Unit (3<sup>rd</sup> train) of the Rodeo Renewed Project, the owner/operator shall conduct sampling and testing to determine the amine and sour water influent streams (effluent of S-599 Amine/Sour Water Strippers) organic and TAC speciation under maximum or near maximum capacity (80% of 80,000 bpd) operation using the following Air District approved test methods, unless alternative sampling and testing methods are approved by the Air District: SW 8260B, Hach TNT 832, UOP 209-00B, EPA Method 610. If within 180 days, if the owner/operator of S-600 is not operating at maximum or near maximum capacity (80% of 80,000 bpd), then the owner/operator shall perform sampling and testing at the interim (as found) operating capacity. Within 90 days from the date when the maximum or near maximum capacity (80% of 80,000 bpd) is attained, the owner/operator shall repeat the sampling and testing at this maximum or near maximum capacity. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:



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- i. Material speciation lab results and/or testing method used for amine and sour water streams;
- ii. Type of feedstock used during the sampling and testing;
- iii. Feed/Processing Rate;
- iv. Reference to Permit Application #31157, Permit Condition 27646, Part 10b;
- v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
- vi. The owner/operator of the above sources shall submit the revised TAC emissions calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher or contain any different TACs than the calculations approved in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

11. a.

- Within 180 days of the startup of S-600 Pretreatment Unit (first two trains) of the Rodeo Renewed Project, the owner/operator shall conduct sampling and testing to determine fuel gas composition and TAC speciation under maximum or near maximum capacity (80% of 80,000 bpd) or normal "as found" operation using the following Air District approved test methods, unless alternative sampling and testing methods are approved by the Air District: ASTM D7833 and ASTM D5504. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
  - i. Material speciation lab results and/or testing methods used for fuel gas streams;
  - ii. Type of feedstock used during the sampling and testing;
  - iii. Feed/Processing Rate;
  - iv. Reference to Permit Application #31157, Permit Condition 27646, Part 11a;
  - v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
  - vi. The owner/operator of the above sources shall submit the revised TAC emissions calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher or contain any different TACs or contain any different TACs than the calculations approved in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements with the higher emissions rates and different TAC speciation.





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(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

11b.

- Within 180 days of the startup of S-600 Pretreatment Unit (3<sup>rd</sup> train) of the Rodeo Renewed Project, the owner/operator shall conduct sampling and testing to determine fuel gas composition and TAC speciation under maximum or near maximum capacity (80% of 80,000 bpd) operation using the following Air District approved test methods, unless alternative sampling and testing methods are approved by the Air District: ASTM D7833 and ASTM D5504. If within 180 days, if the owner/operator of S-600 is not operating at maximum or near maximum capacity (80% of 80,000 bpd), then the owner/operator shall perform sampling and testing at the interim (as found) operating capacity. Within 90 days from the date when the maximum or near maximum capacity (80% of 80,000 bpd) is attained, the owner/operator shall repeat the sampling and testing at this maximum or near maximum capacity. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test method and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
  - i. Material speciation lab results and/or testing method used for fuel gas streams;
  - ii. Type of feedstock used during the sampling and testing;
  - iii. Feed/Processing Rate;
  - iv. Reference to Permit Application #31157, Permit Condition 27646, Part 11b;
  - v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
  - vi. The owner/operator of the above sources shall submit the revised TAC emissions calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher or contain any different TACs than the calculations approved in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements with the higher emissions rates and different TAC speciation.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

12. a.

- Within 180 days of the startup of S-600 Pretreatment Unit (first two trains) of the Renewed Fuel Project, the owner/operator of each S-453 and/or S-455 Cooling Tower shall conduct sampling and testing for total hydrocarbon concentration to determine cooling tower water TAC speciation under maximum or near maximum capacity (80% of 80,000 bpd) or normal "as found" operation using the following Air District approved test methods, unless alternative sampling and testing methods are approved by the Air District: EPA Method 8015D and/or Method 8260/70. Alternatively, the owner/operator may use cooling tower water lab analysis results for compliance with Air District Regulation 11, Rule 10. The report shall be submitted to the Air District's Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
  - i. Material speciation lab results and/or testing methods used for cooling tower water streams;



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- ii. Type of feedstock used during the sampling and testing;
- iii. Feed/Processing Rate;
- iv. Reference to Permit Application #31157, Permit Condition 27646, Part 12a;
- v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
- vi. The owner/operator of the above sources shall submit the revised TAC emissions calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher than the calculations approved in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

12b.

- Within 180 days of the startup of S-600 Pretreatment Unit (3<sup>rd</sup> train) of the Renewed Fuel Project, the owner/operator shall conduct sampling and testing for total hydrocarbon concentration to determine cooling tower water and TAC speciation under maximum or near maximum capacity (80% of 80,000 bpd) operation using the following Air District approved test methods, unless alternative sampling and testing methods are approved by the Air District: EPA Method 8015D and/or Method 8260/70. Alternatively, the owner/operator may use cooling tower water lab analysis results for compliance with Air District Regulation 11, Rule 10. If within 180 days, if the owner/operator of S-600 is not operating at maximum or near maximum capacity (80% of 80,000 bpd), then the owner/operator shall perform sampling and testing at the interim (as found) operating capacity. Within 90 days from the date when the maximum or near maximum capacity (80% of 80,000 bpd) is attained, the owner/operator shall repeat the sampling and testing at this maximum or near maximum capacity. The report shall be submitted to the Air District's Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
  - i. Material speciation lab results and/or testing methods used for cooling tower water streams;
  - ii. Type of feedstock used during the sampling and testing;
  - iii. Feed/Processing Rate;
  - iv. Reference to Permit Application #31157, Permit Condition 27646, Part 12b;
  - v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
  - vi. The owner/operator of the above sources shall submit the revised TAC emissions calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher or contain any different TACs than the calculations approved in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements.



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(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

*True Vapor Pressure of Renewable feedstocks and all renewable Products*

13. On a monthly basis, the owner/operator of S-425 and/or S-426 shall use Air District approved ASTM D6378 (or ASTM 2879) to determine the true vapor pressure and loading emission factors of renewable feedstocks, renewable diesel, renewable jet, renewable gasoline, and any other renewable products such that the measured true vapor pressure are representative of the maximum true vapor pressure of renewable feedstocks, renewable diesel, renewable gasoline, renewable jet, and any other renewable products for that month. The results shall be used to calculate emissions from renewable feedstock and all renewable products loading operations and to demonstrate compliance with Permit Condition #4336, Parts 15 and 16. The owner/operator shall submit the results to the Air District's Engineering Division no later than 30 days after the twelfth month of testing. After twelve months of testing, the owner/operator may propose a change in testing frequency based on established true vapor pressure of renewable feedstocks and all renewable products from testing. Written approval by the Air District's Engineering Division must be received by the owner/operator prior to a change in testing schedule.

(Basis: Regulation 2-1-403 Permit Conditions)

14. The owner/operator of S-425 and S-426 may develop an Air District approved correlation between true vapor pressure and initial boiling point using ASTM D86 to comply with Part 13. The testing plan shall include the following:

- Testing schedule (i.e., number of tests/data points);
- Parameters and test methods;
- Acceptance criteria (i.e., correlated or uncorrelated);

The owner/operator shall obtain written approval from the Air District's Engineering Division prior to using the correlation, if any, for the determination of true vapor pressure.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase)

15. Within 180 days of the authority to construct issuance of the Rodeo Renewed Project, the owner/operator of Sources S-307, S-434 and/or S-1010 shall submit a separate New Source Review application to the Air District to change the combined bubble permit limits in condition #1694, Part A.4, #23125, Part 11, and #22970, Part 2.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase)

16. The owner/operator of the Rodeo Renewed Project shall document, monitor, and maintain the following records to demonstrate the non-applicability determination of a major modification (as defined in Regulation 2-1-234):

- Description of the project;
- Identification of all of the sources associated with the Rodeo Renewed Project;
- Description of the applicability calculations used to determine that the Rodeo Renewed Project is not a "major modification" for that pollutant, including baseline actual emissions, projected actual emissions, and any "netting" that was used; and
- Monitor and keep a record of emissions at each source associated with the Renewable Fuels Project (in tons per year on a calendar year basis).
- The report shall be signed by the responsible official as being true, accurate and complete.

These records shall be kept on-site for at least 5 years. All records shall be recorded in an Air District approved log and made available for inspection by Air District staff upon request.

After 5 calendar years of the Rodeo Renewed Project operation, the owner/operator shall submit a report to the Air District's Engineering Division and EPA stating (i) the facility name, address, telephone number,



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Application No. 31157, and (ii) the annual emissions for all sources associated with the Renewable Fuels Project to verify that the Renewable Fuels Project is not a major modification.

(Basis: Regulation 2-1-234.2 Increase Over Actual Emissions Baseline)

17. Within 180 days of operation, the owner/operator of Pretreatment Unit, S-600, shall perform an Air District-approved source test to demonstrate compliance with the 0.32 g/m<sup>2</sup> silt loading factor for paved roads within the facility boundary. The owner/operator shall submit a silt loading testing protocol, which includes the locations and procedures according to AP-42, to the Air District's Engineering Division for approval prior to testing. Any exceedance of the 0.32 g/ m<sup>2</sup> silt loading factor used for paved roads shall be considered a violation of this condition and shall require the owner/operator to submit a permit application to the Air District for review. (Basis: Regulation 2-2-208 Cumulative Increase)
18. Within 180 days of the startup of each source S-11, S-12, S-13, S-22, S-45, S-352 through S-357, S-438, A-599/A-600 and/or A-601/A-602, the owner/operator shall conduct an initial and at least once every consecutive 5 year period thereafter (in the year prior to the Title V Permit Renewal application submittal) compliance source testing in order to demonstrate compliance with the Vapor Recovery System A-7's minimum capture and destruction efficiency of at least 98% by weight per:
  - Permit Condition 22963, Part 3 for S-139 and S-140, storage tanks
  - Permit Condition 12131 for S-446, storage tank
  - Permit Condition 12132 for S-447, storage tank

The owner/operator shall notify the Air District's Compliance and Enforcement Division, Source Test Section, and Engineering Division at least 30 days in advance of the initial and once every consecutive 5 year period compliance source tests such that the Air District may observe during testing. The results shall be delivered to the Air District's Source Test Section no later than 60 days from the date of the test. If the TOC capture and destruction efficiency is greater than or equal to 98% by weight, the source testing results show compliance with the assumptions used in analysis for the issuance of the authority to construct of the Renewable Fuels Project and no further action will be required. For the purpose of these conditions TOC shall be considered equal to POC and equal to NMOC.

For each source, the owner/operator of S-11, S-12, S-13, S-22, S-45, S-352 through S-357, S-438, A-599/A-600 and/or A-601/A-602 shall measure the following:

- the fuel feed rate in SCFM
- the TOC emission rate at the stack
- the flue gas flow rate in SCFM at the stack
- the oxygen content of the stack flue gas
- the destruction efficiency of TOC as measured across the Furnace/combustion device.

The owner/operator shall ensure that copies of the results of the source testing along with related calculations and relevant process data are received by the Air District's Engineering Division and Source Test Section not more than 60 days following the date of the source test.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics, Regulation 2-2-302 Offsets, Regulation 1- 238 Parametric Monitor)

#### Contemporaneous *Onsite* Emissions Reduction Credits

19. Within 90 days after the startup of any equipment of the Rodeo Renewed Project, the owner of S-29, S-30, S-36, S-109, S-350, S-351, S-439, S-442, S-1002 and/or S-1003 shall submit a Device Data Update Form (Form DDU) to ensure all sources used for contemporaneous onsite emission reduction credits to offset emissions increases for this project are permanently shutdown and their permits surrendered. The owner/operator shall enter into the record log both dates when each of the unit was shut down and disconnected or dismantled.



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The final CERCs shall be based on the future shutdown date of each S-29, S-30, S-36, S-109, S-350, S-351, S-439, S-442, S-1002 and/or S-1003. The final CERCs will be adjusted based on the baseline period ending date (shutdown date) when the emission reduction becomes enforceable (when the owner/operator relinquishes the source's permit). The owner/operator shall provide any additional emission credits if the final CERCs are less than the required CERCs required in the Application 31157.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-221 and 2-2-302/303 Offsets, Regulation 2-2-231 Equivalence Credit, Regulation 2-2-603.3 Baseline period ending date)

20. Within 90 days of the completion of the installation/replacement of all fugitive components in Permit Condition #27658, Part 11, the owner/operator of S-350, S-1002 and/or S-1003 shall submit a final count of removed components by source associated with the Rodeo Renewed Project for contemporaneous onsite emission reduction credits to offset emissions increases for this project. A total of 2.605 tons per year of POC emissions have been credited for the removal of the following fugitive components:

- 2,216 valves
- 3,036 connectors
- 47 PSV's/PRV's
- 25 pumps
- 362 process drains

If the removed fugitive component counts exceed or are less than the component counts stated above, the contemporaneous onsite emission reduction credits shall be adjusted as needed, subject to APCO approval, to reflect contemporaneous onsite emission reduction credits from actual removed component counts based on the date that the emissions reduction becomes enforceable.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-221 and 2-2-302 Offsets, Regulation 2-2-231 Equivalence Credit)

21. The owner/operator of storage tanks S-111, S-112, S-113, S-135, S-137, S-173, S-340, and/or S-445 may continue to store but shall not load any organic petroleum materials after the startup of the first source (or any source) from the Rodeo Renewed Project. The Air District shall issue an exemption certificate for storage tanks S-111, S-112, S-113, S-135, S-137, S-173, S-340, and/or S-445 only after the owner/operator notifies the Engineering Division of the storage service change from the organic petroleum materials to exempt renewable feedstocks and/or renewable diesels.

The owner/operator of S-111, S-112, S-113, S-135, S-137, S-173, S-340, and/or S-445 shall submit a new application to the Air District for the New Source Review (NSR) and approval before the storage tank(s) S-111, S-112, S-113, S-135, S-137, S-173, S-340, and/or S-445 is/are being used in a non-exempt service.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-123.3.2 exemption, Reg 2-1-123.3.6 (storage of tallow or vegetable oils, Regulations 2-1-301/302))

22. The owner/operator of storage tanks S-97, S-110, S-114, S-174, S-175, S-261, S-334, S-360, S-448, S-449 and/or S-506 shall not load any organic petroleum materials after the startup of the first source (or any source) from the Rodeo Renewed Project. The Air District shall issue an exemption certificate for storage tanks S-97, S-110, S-114, S-174, S-175, S-261, S-334, S-360, S-448, S-449 and/or S-506 only after these tanks are cleaned and ready to store exempt renewable feedstocks and/or renewable diesel services. The owner/operator of these tanks shall notify the Engineering Division of the storage service change from the organic petroleum materials to exempt renewable feedstocks and/or renewable diesel before the Permit to Operate issuance of the first source (or any source) from the Rodeo Renewed Project.

The owner/operator of S-97, S-110, S-114, S-174, S-175, S-261, S-334, S-360, S-448, S-449 and/or S-506 shall submit a new application to the Air District for the New Source Review (NSR) and approval before





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the storage tank(s) S-97, S-110, S-114, S-174, S-175, S-261, S-334, S-360, S-448, S-449 and/or S-506 is/are being used in a non-exempt service.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-123.3.2 exemption, Reg 2-1-123.3.6 (storage of tallow or vegetable oils, Regulations 2-1-301/302)

***End of Conditions***



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## FACILITY-WIDE REQUIREMENTS

Amended by Application 31703 (2022), and Rodeo Renewed Project, Application 31157 (2022) – Delete exempt Sources S-110, S-111, S-112, S-113, S-114; shutdown S-29, S-30, S-351 upon startup.

### A. THROUGHPUT LIMITS

The following limits are imposed through this permit in accordance with Regulation 2-1-234.3. Sources require BOTH hourly/daily and annual throughput limits (except for tanks and similar liquid storage sources, and small manually operated sources such as cold cleaners which require only annual limits). Sources with previously imposed hourly/daily AND annual throughput limits are not listed below; the applicable limits are given in the specific permit conditions listed above in this section of the permit. Also, where hourly/daily capacities are listed in Table II-A, these are considered enforceable limits for sources that have a New Source Review permit. Throughput limits imposed in this section and hourly/daily capacities listed in Table II-A are not federally enforceable for grandfathered sources. Grandfathered sources are indicated with an asterisk in the source number column in the following table. Refer to Title V Standard Condition J for clarification of these limits.

In the absence of specific recordkeeping requirements imposed as permit conditions, monthly throughput records shall be maintained for each source.

source number	hourly / daily throughput limit	annual throughput limit (any consecutive 12-month period unless otherwise specified)
15	Table II-A	19.9 E 6 therm total at S15 through S19
16	Table II-A	19.9 E 6 therm total at S15 through S19
17	Table II-A	19.9 E 6 therm total at S15 through S19
18	Table II-A	19.9 E 6 therm total at S15 through S19
19	Table II-A	19.9 E 6 therm total at S15 through S19
20	Table II-A	1.9 E 6 therm
21	Table II-A	0.7 E 6 therm
22	Table II-A	2.6 E 6 therm
31	Table II-A	1.7 E 6 therm
43	Table II-A	19.1 E 6 therm
44	Table II-A	3.8 E 6 therm
*100	NA for tank	4.38 E 6 bbl
101	NA for tank	3.68 E 9 gal
102	NA for tank	3.68 E 9 gal
106	NA for tank	3.68 E 9 gal
*107	NA for tank	8.76 E 6 bbl
*110 superseded by Condition 27646 Part 22		
*111 superseded by Condition 27646 Part 21		



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source number	hourly / daily throughput limit	annual throughput limit (any consecutive 12-month period unless otherwise specified)
*112 superseded by Condition 27646 Part 21		
*113 superseded by Condition 27646 Part 21		
*114 superseded by Condition 27646 Part 22		
*115	NA for tank	4.38 E 6 bbl
*125 superseded by Condition 27787		
129	NA for tank	4.6 E 6 bbl
133	NA for tank	8.76 E 5 bbl
*134	NA for tank	1.31 E 7 bbl
150 superseded by Condition 27661		
151	NA for tank	4.38 E 7 bbl
*177	NA for tank	2.63 E 7 bbl
178	NA for tank	3.50 E 7 bbl
183	NA for tank	4.38 E 5 bbl
184	NA for tank	4.38 E 6 bbl
*194	NA for tank	100 bbl
195 Superseded by Condition 27653		
*216	NA for tank	4.6 E 6 bbl
*239	NA for tank	8.76 E 6 bbl
*254 superseded by Condition 27657		
*255	NA for tank	7.01 E 7 bbl
*256 superseded by Condition 27657		
*257 superseded by Condition 27657		
*258	NA for tank	7.01 E 7 bbl
*259	NA for tank	7.01 E 7 bbl
294	20 gpm	400,000 gallons
305	28,000 bbl/day	10.22 E 6 bbl
306	Table II-A	7.67E6 bbl
*319	Table II-A	3.51 E 6 bbl
324	Table II-A	3.68 E 9 gallons
336	Table II-A	9.2 E 6 therm
337	Table II-A	2.8 E 6 therm
*338 superseded by Condition 27657		
343	NA for tank	4.38 E 7 bbl



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source number	hourly / daily throughput limit	annual throughput limit (any consecutive 12-month period unless otherwise specified)
360 superseded by 27646, Part 22		
370	Condition 12121	4.03 E6 bbl
371	Table II-A	4.8 E6 therm for S371/S372
372	Table II-A	4.8 E6 therm for S371/S372
380	0.45 ton/hr	3,942 ton
381	420,000 gal/hr	3.68 E 9 gal
382	420,000 gal/hr	3.68 E 9 gal
383	420,000 gal/hr	3.68 E 9 gal
384	420,000 gal/hr	3.68 E 9 gal
385	Table II-A	3.68 E 9 gal
386	3600 gal/hr	3.2 E 7 gal
387	Table II-A	13.14 E 6 gal
390	N/A for tank	7.884 E 6 gal
392	N/A for tank	7.884 E 6 gal
400	N/A for sump	3.68 E 9 gal
401	N/A for sump	3.68 E 9 gal
435	Table II-A	6.6 E 6 bbl
436	Table II-A	4.7 E 6 bbl
437	Table II-A	10.4E 9 ft3
462	Table II-A	1.533 E 9 ft3
463	Table II-A	365,000 bbl
1007	Table II-A	3.68 E 9 gal

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-403 Permit Conditions)

#### B. OTHER REQUIREMENTS

1. The owner/operator shall notify the District in writing by fax or email no less than three calendar days in advance of any scheduled startup or shutdown of any process unit, and, for any unscheduled startup or shutdown of a process unit, within 48 hours or within the next normal business day. The notification shall be sent in writing by fax or email to the Director of Enforcement and Compliance. This requirement is not federally enforceable. [Regulation 2-1-403]

*End of Conditions*



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**Source Nos. S-324, S-381, S-382, S-383, S-384, S-385, S-386, S-387, S-390, S-400, S-401, S-1007, S-1008, & S-1009**

**Condition No. 1440**

**Plant No. 21359**

**Application No. 31157**

CONDITIONS FOR S324, S381, S382, S383, S384, S385, S386, S387, S390, S392, S400, S401, S1007, S1008, S1009

This condition was amended by Applications 483 in 1988, 10623 in 2005, 13424 in 2007, 13727 in 2009, 21295 in 2010, and 29933 in 2019.

1. S324 API Separator shall be operated such that the liquid in the main separator basin is in full contact with the fixed concrete roof. This condition shall not apply during separator shutdown for maintenance or when S-324 is abated by an oxidizer. [Cumulative Increase]
2. Diversions of refinery wastewater around the Water Effluent Treating Facility to the open Storm Water Basins (S1008, S1009) shall be minimized. These diversions shall not cause a nuisance as defined in District Regulation 7 or Regulation 1-301. [Cumulative Increase]
3. Records shall be maintained of each incident in which refinery wastewater is diverted to the open storm water basins. These records shall include the reason for the diversion, the total quantity of wastewater diverted to the basins, and the approximate hydrocarbon content of the water. [Cumulative Increase]
4. The sources below shall conduct monthly leak inspections in accordance with Regulation 8-8-603. After three consecutive inspections with no leaks detected that are not vapor-tight, inspections will be conducted quarterly for that source. If any leak is detected that is not vapor-tight during an inspection, then monthly inspections must be completed until there are three consecutive inspections without any leaks that are not vapor-tight. Any leak found by the owner/operator or BAAQMD that is not vapor-tight must be minimized within 24 hours and repaired within 7 days. Vapor-tight is defined in Regulation 8, Rule 8.
  - a. Doors, hatches, covers, and other openings on the S324 API Separator, forebay, outlet basin, and channel to the S1007 DAF Unit.
  - b. Doors, hatches, covers, and other openings on the S1007 DAF Unit and the S400 Wet and S401 Dry Weather Sumps, except for the vent opening on S-400 and S-401.
  - c. Any open process vessel, distribution box, tank, or other equipment downstream of the S1007 DAF Unit (S381, S382, S383, S384, S385, S386, S387, S390, S392).[Cumulative Increase]
5. Records shall be kept of each inspection in Part 4 and shall be made available to District personnel upon request. [Cumulative Increase]
6. The maximum wastewater throughput at the S324 API Separator and S1007 DAF Unit shall not exceed 7,500 gpm during media filter backwash and 7,000 gpm during all other times for each unit. Any modifications to equipment at this facility that increase the annual average waste water throughput at S324 and S1007 shall first be submitted to the BAAQMD in the form of a permit application. [Cumulative Increase]
7. This part will apply after VOC emissions at S1007 must be reduced to provide offsets for Application 13424 per Condition 22970, Part B. The owner/operator shall ensure that S1007, DAF, is controlled by A49, DAF Thermal Oxidizer, A51, DAF Carbon Bed, or A53, Thermal Oxidizer at all times of operation of S1007, except for up to 175 hours per any consecutive 12-month period for startup, shutdown, or maintenance. [Offsets]





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**Source Nos. S-324, S-381, S-382, S-383, S-384, S-385, S-386, S-387, S-390, S-400, S-401, S-1007, S-1008, & S-1009**

**Condition No. 1440**

**Plant No. 21359**

**Application No. 31157**

- a. Through source testing as described in Part 7(b) and 7(c), the owner/operator must demonstrate that the total reduction of emissions through use of A49, DAF Thermal Oxidizer and/or A51, DAF Carbon Bed will result in a total reduction of 44 tons POC per year, considering that abatement will not occur with either abatement device up to 175 hours per year. If initial testing does not demonstrate total reduction of 44 tons POC per year, the owner/operator may choose to:
  - i. In the case of A49, DAF Thermal Oxidizer, perform 4 tests in one year and average the results. In this case, the tests will be performed no less than 2 months apart and no more than 4 months apart.
  - ii. In the case of A51, DAF Carbon Bed, average the results of one year's worth of monitoring. If, after further testing, a total of 44 tons worth of POC reduction is not demonstrated, the owner/operator will supply offsets necessary to ensure a total reduction of 44 tons per year POC pursuant to BAAQMD Regulation 2-2-302.  
[Offsets, CEQA]
- b. The following conditions apply to operation of A49, DAF Thermal Oxidizer:
  - i. Within 90 days of the startup date of A49, DAF Thermal Oxidizer, the owner/operator shall perform a source test to determine the following:
    1. Mass emissions rate for POC that is collected and sent to A49.
    2. Mass emissions rate for POC after abatement by A49.
    3. Mass emissions rate for H<sub>2</sub>S that is collected and sent to A49.
    4. Mass emissions rate for H<sub>2</sub>S after abatement by A49.
    5. Mass emissions rate for SO<sub>2</sub>

During the source test, the owner/operator shall determine the temperature required to achieve 98.0% destruction by weight of POC or a concentration of 10 ppmv POC at the outlet. The temperature shall become an enforceable limit.

For the purposes of determining the amount of POC controlled, the owner/operator shall use District Method ST-7, Organic Compounds. The owner/operator shall submit the source test results to the District Source Test Manager, the District Permit Evaluation Manager, and the District Director of Compliance and Enforcement no later than 60 days after any source test.

[Offsets, CEQA]

- ii. After the initial source test required in Part 8 of this condition, the minimum temperature for A49 shall be 1445 degrees F. A49 shall not be operated below the minimum temperature except during an "Allowable Temperature Excursion" as defined below:
  1. Operation of A49 within 20°F below the minimum temperature
  2. Operation of A49 more than 20°F below the minimum temperature for a period or periods which, when combined are less than or equal to 15 minutes in any hour; or
  3. Operation of A49 more than 20°F below the minimum temperature for a period or periods which when combined are more than 15 minutes in any hour, provided that all three of the following criteria are met:
    - a. The excursion does not exceed 50°F below the minimum temperature;
    - b. The duration of the excursion does not exceed 24 hours; and
    - c. The total number of such excursions does not exceed 12 per calendar year (or any consecutive 12 month period).

Two or more excursions greater than 15 minutes in duration occurring during the same 24-hour period shall be counted as one excursion toward the 12 excursion limit. For each such excursion, sufficient records shall be kept to demonstrate that they meet the qualifying criteria described above. Records shall include at least the following information:

1. Temperature controller setpoint;



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-324, S-381, S-382, S-383, S-384, S-385, S-386, S-387, S-390, S-400, S-401, S-1007, S-1008, & S-1009**

**Condition No. 1440**

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2. Starting date and time, and duration of each Allowable Temperature Excursion;
  3. Measured temperature during each allowable Temperature Excursion;
  4. Number of Allowable Temperature Excursions per month, and total number for the current calendar year; and
  5. All strip charts or other temperature records.  
[Offsets, CEQA]
- iii. To determine compliance with the temperature limit in Part 9, A49, Thermal Oxidizer shall be equipped with a temperature measuring device capable of continuously measuring and recording the temperature in A49. The temperature device shall be installed and maintained in accordance with the manufacturer's recommendations, shall be ranged appropriately to measure the temperature limit determined, and shall have a minimum accuracy over the range of 1.0 percent of full-scale.  
[Offsets, CEQA]
- iv. Deleted Application 13427.
- v. The owner/operator shall perform a source test to determine emissions of SO<sub>2</sub> from A49, DAF Thermal Oxidizer using District Method ST-19A, Sulfur Dioxide, Continuous Sampling. The owner/operator shall submit the source test results to the District Source Test Manager, the District Permit Evaluation Manager and the District Director of Compliance and Enforcement no later than 60 days after any source test.  
[Offsets, CEQA]
- vi. If source test data per Part 7.b.v shows that the annual SO<sub>2</sub> emissions are greater than 1.2 tons per year, the owner/operator shall provide additional SO<sub>2</sub> offsets in accordance with BAAQMD Regulation 2-2-303.  
[Offsets, CEQA]
- c. The following conditions apply to A51, DAF Carbon Bed
- i. A51 shall consist of two or more activated carbon vessels arranged in series, with at least one carbon vessel in service except for up to 175 hours per any consecutive 12-month period for startup, shutdown, or maintenance.  
[Offsets, CEQA]
  - ii. Total emission reduction of A51 shall be demonstrated through use of an in-line flowmeter, and the results of monitoring per the conditions below.  
[Offsets]
  - iii. The owner/operator of A51 shall monitor with a photo-ionization detector (PID), flame-ionization detector (FID), or other method approved in writing by the Air Pollution Control Officer at the following locations:
    1. The stream prior to any carbon vessels
    2. At the inlet to the last carbon vessel in series
    3. At the outlet of the carbon vessel that is last in series prior to venting to atmosphere  
[Offsets]



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- iv. When using an FID to monitor breakthrough, readings may be taken with or without a carbon filter tip fitted on the FID probe. Concentrations measured with the carbon filter tip in place shall be considered methane for the purpose of these permit conditions.  
[Offsets]
- v. All breakthrough monitoring readings shall be recorded in a monitoring log each time they are taken. Readings shall be conducted on a daily basis initially, but after two months of daily collection, the owner/operator may propose for District review, based on actual measurements taken at the site during operation of the source, that the monitoring schedule be changed to weekly based on the demonstrated breakthrough rates of the carbon vessels. If the District Engineering Division does not disapprove of the proposed monitoring changes within 30 days, the owner/operator shall commence weekly monitoring.  
[Offsets]
- vi. The owner/operator shall utilize the activated carbon vessels in such a manner to ensure that the outlet stream to atmosphere contains below 10 ppm VOC or 98% reduction of VOC, whichever is greater.  
[Offsets]
- vii. The owner/operator of this source shall maintain the following records for each month of operation of A51:
  - 1. The hours and times of operation
  - 2. Each monitor reading or analysis result for the day of operation they are taken.
  - 3. The number of spent carbon beds removed from service.[Offsets]

8. Deleted Application 13427.

9. This part will apply after VOC emissions at S1007 must be reduced to provide offsets for Application 13424 per Condition 22970, Part B. The owner/operator shall seal the DAF outlet channel and downstream sumps by a solid cover with gaskets. Any vents installed on the covered channel shall be routed to the thermal oxidizer or an equivalent control as determined by the APCO. [Offsets, CEQA]

\*10. The owner/operator must control with a thermal oxidizer at least 90% of the time on a consecutive 12-month basis, unless owner/operator controls H<sub>2</sub>S with an equivalent control device as determined by the APCO. [CEQA]

**Alternate Operating Scenario for S1007**

11. During periods when A49, DAF Thermal Oxidizer, A51, DAF Carbon Bed, and A53, Thermal Oxidizer are not in operation and not abating S1007, the owner/operator shall comply with the following requirements:

- a. Affected facility wastes routed to the API or DAF shall be included in the facility TAB in accordance with 40 CFR 61, Subpart FF.
- b. The owner/operator shall comply with BAAQMD and SIP Regulations 8-8-307.2 in lieu of BAAQMD and SIP Regulations 8-8-307.1.
- c. S1007 shall not be subject to the closed vent and control device requirements in 40 CFR 61.349.
- d. The owner/operator shall comply with parts 4, 5, 7, and 9 of this condition during periods when A49, DAF Thermal Oxidizer, A51, DAF Carbon Bed, and A53, Thermal Oxidizer are not in operation and not abating S1007.



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**Source Nos. S-324, S-381, S-382, S-383, S-384, S-385, S-386, S-387, S-390, S-400, S-401, S-1007, S-1008, & S-1009**

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This is considered an Alternate Operating Scenario in accordance with BAAQMD Regulation 2-6-409.7 and 40 CFR 70. The owner/operator shall keep a record in a contemporaneous log when a period of non-control at S1007 commences and when control of S1007 resumes. [40 CFR 61, Subpart FF, 40 CFR 70.6(a)(9), BAAQMD Regulation 2-6-409.7]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-296 & S-398**

**Condition No. 18255**

**Plant No. 21359**

**Application No. 31157**

FOR SOURCES S296 AND S398, FLARES

1. Deleted Application 12601.
2. Deleted Application 12601.
3. For the purposes of these conditions, a flaring event is defined as a flow rate of vent gas flared in any consecutive 15 minutes period that continuously exceeds 330 standard cubic feet per minute (scfm). If during a flaring event, the vent gas flow rate drops below 330 scfm and then increases above 330 scfm within 30 minutes, that shall still be considered a single flaring event, rather than two separate events. For each flaring event during daylight hours (between sunrise and sunset), the owner/operator shall inspect the flare within 15 minutes of determining the flaring event, and within 30 minutes of the last inspection thereafter, using video monitoring or visible inspection following the procedure described in Part 4. [Regulation 2-6-409.2]
4. The owner/operator shall use the following procedure for the initial inspection and each 30-minute inspection of a flaring event.
  - a. If the owner/operator can determine that there are no visible emissions using video monitoring, then no further monitoring is necessary for that particular inspection.
  - b. If the owner/operator cannot determine that there are no visible emissions using video monitoring, the owner/operator shall conduct a visual inspection outdoors using either:
    - i. EPA Reference Method 9; or
    - ii. Survey the flare by selecting a position that enables a clear view of the flare at least 15 feet, but not more than 0.25 miles, from the emission source, where the sun is not directly in the observer's eyes.
  - c. If a visible emission is observed, the owner/operator shall continue to monitor the flare for at least 3 minutes, or until there are no visible emissions, whichever is shorter.
  - d. The owner/operator shall repeat the inspection procedure for the duration of the flaring event, or until a violation is documented in accordance with Part 5. After a violation is documented, no further inspections are required until the beginning of a new calendar day. [Regulation 6-1-301, 2-1-403]
5. The owner/operator shall comply with one of the following requirements if visual inspection is used:
  - a. If EPA Method 9 is used, the owner/operator shall comply with Regulation 6-1-301 when operating the flare.
  - b. If the procedure of Part 4.b.ii is used, the owner/operator shall not operate a flare that has visible emissions for three consecutive minutes. [Regulation 2-6-403]
6. The owner/operator shall keep records of all flaring events, as defined in Part 3. The owner/operator shall include in the records the name of the person performing the visible emissions check, whether video monitoring or visual inspection (EPA Method 9 or visual inspection procedure of Part 4) was used, the results of each inspection, and whether any violation of this condition (using visual inspection procedure in Part 4) or Regulation 6-1-301 occurred (using EPA Method 9). [Regulation 2-6-501; 2-6-409.2]
7. Deleted Application 12601.
8. The owner/operator shall operate and maintain a flare gas recovery system to control continuous or routing combustion in the Refinery Main Flare (S296). Use of a flare gas recovery system on a flare obviates the need to continuously monitor and maintain records of hydrogen sulfide in the gas as





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otherwise required by 40 CFR 60.105(a)(4) and 60.7. [Consent Decree Case No. 05-0258, paragraph 139(a)]

9. Recognizing that periodic maintenance may be required for properly designed and operated flare gas recovery systems, Phillips 66 will take all reasonable measure to minimize emissions while such periodic maintenance is being performed. Nothing in this part shall exempt the source from compliance with other applicable State and Local requirements. [Consent Decree Case No. 05-0258, paragraph 148]
10. The flare gas recovery system may be temporarily bypassed in the event of an emergency or in order to ensure safe operation of refinery processes. Nothing in this part shall exempt the source from compliance with other applicable State and Local requirements. [Consent Decree Case No. 05-0258, paragraph 149]
11. Phillips 66 shall eliminate the routes of continuous or intermittent, routinely-generated fuel gases to the MP-30 Flare (S398) and operate the flare such that it receives only process upset gases, fuel gas released as a result of relief valve leakage or gases released due to other emergency malfunctions.

12. Acid Gas or Hydrocarbon Flaring Incident Root Cause Analyses

The facility shall investigate the cause of acid gas and hydrocarbon flaring incidents, take reasonable steps to correct the conditions that have caused or contributed to such flaring incidents, and minimize such flaring incidents.

For purposes of this specific part, acid gas flaring shall mean the continuous or intermittent combustion of acid gas and/or sour water stripper gas. Hydrocarbon flaring shall mean the continuous or intermittent combustion of refinery-generated gases, except for acid gas and/or sour water stripper gas and/or tail gas, that results in the emission of sulfur dioxide equal to, or greater than 500 pounds in a 24 hour period; provided, however, that if 500 pounds or more of sulfur dioxide have been emitted in a 24 hour period and flaring continues into subsequent, contiguous, non-overlapping 24 hour period(s), each period of which results in emissions equal to, or in excess of 500 pounds of sulfur dioxide, then only one flaring incident shall have occurred. Subsequent, contiguous, non-overlapping periods are measured from the initial commencement of flaring within the flaring incident.

The owner/operator shall take, as expeditiously as practicable, such interim and/or long-term corrective actions, if any, as are consistent with good engineering practice to minimize the likelihood of a recurrence of the root cause and all contributing causes of the flaring incident(s). For purposes of this specific condition, Root Cause shall mean the primary cause(s) of a flaring incident(s) as determined through a process of investigation. To the extent that a flaring incident has as its root cause the bypass of a flare gas recovery system for safety or maintenance, the owner/operator is only required to keep a record of the date, time and duration of the event. A single Root Cause analysis may be used for root causes that occur routinely. Where the owner/operator has previously analyzed hydrocarbon incidents related to startup and shutdown, it may refer to those analyses when evaluating later incidents. Records of such investigations and corrective actions shall be kept onsite and shall be made available to District staff upon request. [Consent Decree Case No. 05-0258, paragraphs 152, 167]

13. Tail Gas RCA

Tail gas flaring shall mean combustion of tail gas that either is: (i) combusted in a flare and results in 500 pounds or more of SO<sub>2</sub> emissions in any 24 hour period; or (ii) Combusted in a thermal incinerator and results in excess emissions of 500 pounds or more of SO<sub>2</sub> emissions in any 24 hour period. Only those time periods which are in excess of a SO<sub>2</sub> concentration of 250 ppm (rolling



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twelve-hour average) shall be used to determine the amount of excess SO<sub>2</sub> emissions from the incinerator; provided, however, that if 500 pounds or more of sulfur dioxide have been emitted in a 24 hour period and flaring continues into subsequent, contiguous, non-overlapping 24 hour period(s), each period of which results in emissions equal to, or in excess of 500 pounds of sulfur dioxide, then only one flaring incident shall have occurred. Subsequent, contiguous, non-overlapping periods are measured from the initial commencement of flaring within the flaring incident.

The owner/operator shall take, as expeditiously as practicable, such interim and/or long-term corrective actions, if any, as are consistent with good engineering practice to minimize the likelihood of a recurrence of the Root Cause and all contributing causes of the flaring incident(s). For purposes of this specific condition, Root Cause shall mean the primary cause(s) of a flaring incident(s) as determined through a process of investigation. To the extent that a flaring incident has as its root cause the bypass of a flare gas recovery system for safety or maintenance, the owner/operator is only required to keep a record of the date, time and duration of the event. A single Root Cause analysis may be used for root causes that occur routinely. Where the owner/operator has previously analyzed hydrocarbon incidents related to startup and shutdown, it may refer to those analyses when evaluating later incidents. Records of such investigations and corrective actions shall be kept onsite and shall be made available to District staff upon request. [Consent Decree Case No. 05-0258, paragraph 152]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-352, S-353, S-354, S-355, S-356, & S-357**

**Condition No. 18629**

**Plant No. 21359**

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Conditions for S352, S353, S354, S355, S356, S357

May 30, 1989 PSD Permit Amendments (first issued March 3, 1986)

Permit NSR 4-4-3 SFB 85-03

I. [Obsolete – Approval to Construct executed in a timely manner]

II. [Obsolete – Approval to Construct executed in a timely manner]

III. Facilities Operation

All equipment, facilities and systems installed or used to achieve compliance with the terms and conditions of this Approval to Construct/Modify shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions.

IV. Malfunction

The Regional Administrator shall be notified by telephone within two working days following any failure of air pollution control equipment, process equipment, or of any process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in Section IX of these conditions. In addition, the Regional Administrator shall be notified in writing within 15 days of any such failure. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under Section IX of these conditions, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations that such malfunction may cause.

V. Right to Entry

The Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local air pollution control agency, and/or their authorized representatives, upon presentation of credentials, shall be permitted:

- A. to enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this Approval to Construct/Modify; and
- B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Approval to Construct/Modify; and
- C. to inspect any equipment, operation, or method required in this Approval to Construct/Modify; and
- D. to sample emissions from this source.

VI. Transfer of Ownership

In the event of any changes in control or ownership of facilities to be constructed or modified, this Approval to Construct/Modify shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Approval to Construct/Modify and its conditions by letter, a copy of which shall be forwarded to the Regional Administrator and the State and local Air Pollution Control Agency.

VII. Severability

The provisions of this Approval to Construct/Modify are severable, and, if any provisions of this Approval to Construct/Modify ~~is~~are held invalid, the remainder of this Approval to Construct/Modify shall not be affected thereby.

VIII. Other Applicable Regulations



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**Condition No. 18629**

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The owner/operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of Parts 52, 60 and 61 and all other applicable Federal, State and local air quality regulations.

**IX. Special Conditions**

A. [Obsolete – Approval to Construct executed in a timely manner]

**B. Air Pollution Control Equipment**

The owner/operator shall install, continuously operate, and maintain the following air pollution controls to minimize emissions. Controls listed shall be fully operational upon startup of the proposed equipment.

1. Each gas turbine shall be equipped with steam injection for the control of NO<sub>x</sub> emissions.
2. Each gas turbine shall be equipped with a Selective Catalytic Reduction (SCR) system for the control of NO<sub>x</sub> emissions.

**D. Operating Limitations**

1. The gas turbines and Heat Recovery Steam Generator (HRG) burners shall be fired only on refinery fuel gas and natural gas
2. The firing rate of each gas turbine/HRG burner set shall not exceed 466 MMbtu/hr.
3. The total fuel firing rate of the Steam/Power Plant shall not exceed 1048 MMbtu/hr.
4. The owner/operator shall maintain records of the amount of fuel used in the gas turbines and the HRG Burners, hours of operation, sulfur content of the fuel, and the ratio of steam injected to fuel fired in each gas turbine, in a permanent form suitable for inspection. The record shall be retained for at least two years following the date of record and shall be made available to EPA upon request.

**E. Emission Limits for NO<sub>x</sub>**

On or after the date of startup, owner/operator shall not discharge from the gas turbine/HRG Burner sets NO<sub>x</sub> in excess of the more stringent of 83 lb/hr total or 25 ppmv at 15% O<sub>2</sub> (3-hour average), or 664 lb/day per set. The concentration limit shall not apply for 4 hours during startup or 2 hours during shutdown.

**F. Emission Limits for SO<sub>2</sub>**

On or after the date of startup, the owner/operator shall not discharge from the gas turbine/HRG Burner sets SO<sub>2</sub> in excess of 15.6 lb/hr per set or 44 lb/hr total (3-hour average). Additionally, total SO<sub>2</sub> emissions shall not exceed 34 lb/hr (3 hour average) for more than 36 days per year, and shall not exceed a total of 153 tons per year (365 days)

**G. Continuous Emission Monitoring**

1. Prior to the date of startup and thereafter, the owner/operator shall install, maintain and operate the following continuous monitoring systems downstream of each of the gas turbine/HRG Burner units:
  - a. Continuous monitoring systems to measure stack gas NO<sub>x</sub> and SO<sub>2</sub> concentrations. The systems shall meet EPA monitoring performance specifications (60.13 and 60, Appendix B, Performance Specifications). Alternatively, the SO<sub>2</sub> continuous monitor may be substituted for by a continuous monitoring system measuring H<sub>2</sub>S in the fuel gas system and daily sampling for total sulfur in the fuel gas.
  - b. A system to calculate the stack gas volumetric flow rates continuously from actual process variables.



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-352, S-353, S-354, S-355, S-356, & S-357**

**Condition No. 18629**

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2. The owner/operator shall maintain a file of all measurements, including continuous monitoring system performance evaluations, all continuous monitoring system monitoring device calibration checks, adjustments and maintenance performed on these systems or devices, and all other information required by 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports and records.
3. The owner/operator shall submit a written report of SO<sub>2</sub> emission status and all excess emissions to EPA (Attn: A3-3) for every calendar quarter. The report shall include the following:
  - a. If fuel gas samples are used to determine SO<sub>2</sub> emissions:
    - (1) The total measured sulfur concentration in each fuel gas sample for the calendar quarter.
    - (2) The daily average sulfur content in the fuel gas, daily average SO<sub>2</sub> mass emission rate (lb/hr), and total tons per year of SO<sub>2</sub> emitted for the last 365 consecutive days. Total SO<sub>2</sub> emissions exceeding 34 lb/hr must be identified.
  - b. The magnitude of excess emissions computed in accordance with 60.13(h), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
  - c. Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the cogeneration gas turbine system. The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted shall also be reported.
  - d. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.
  - e. When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report.
  - f. Excess emissions shall be defined as any three-hour period during which the average emissions of NO<sub>x</sub> and/or SO<sub>2</sub> as measured by the continuous monitoring system and/or calculated from the daily average of the total sulfur in the fuel gas, exceeds the NO<sub>x</sub> and/or SO<sub>2</sub> maximum emission limits set for each of the pollutants in Conditions IX.E and IX.F. above
  - g. Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limits for the purpose of this permit.

**H. New Source Performance Standards**

The proposed cogeneration facility is subject to the Federal regulations entitled Standards of Performance for New Stationary Sources (60). The owner/operator shall meet all applicable requirements of Subparts A and GG of this regulation.

**X. Agency Notifications**

All correspondence as required by this Approval to Construct/Modify shall be forwarded to:

A. Director, Air Management Division (Attn: A3-3)

EPA Region 9  
215 Fremont Street  
San Francisco, CA 94105 (415/974-8034)

B. Chief, Stationary Source Division

California Air Resources Board  
P O Box 2815  
Sacramento, CA 95812

C. Air Pollution Control Officer





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Bay Area Air Quality Management District  
375 Beale Street, Suite 600,  
San Francisco, CA 94105

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-318**

**Condition No. 22549**

**Plant No. 21359**

**Application No. 31157**

Source 318, U76 Gasoline/Mid Barrel Blending Unit

1. The owner/operator shall ensure that the daily throughput of petroleum liquids, excluding diesel, at S318, U76 Gasoline/Mid Barrel Blending Unit, does not exceed 113,150 barrels/day. No daily limit is placed on diesel. [Cumulative Increase]
2. The owner/operator shall ensure that the throughput of petroleum liquids excluding diesel at S318 does not exceed 41,300,000 barrels/yr. [Cumulative increase]
3. The owner/operator shall keep daily records of throughput of all petroleum fluids at S318, U76 Gasoline/Mid Barrel Blending Unit, in a District-approved log. These records shall be kept for at least five years and shall be made available to the District upon request. [Cumulative Increase]
4. All pressure relief devices on the process unit shall be vented to a fuel gas recovery system, furnace, or flare with a recovery/destruction efficiency of 98%. [8-28-302, BACT]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-339**

**Condition No. 22968**

**Plant No. 21359**

**Application No. 31157**

Source S339, U80 Gasoline/Mid Barrel Blending

1. The owner/operator shall ensure that the throughput of S339 does not exceed 52,600,000 barrels over any rolling 12-month period.
2. The owner/operator shall keep throughput records for this source on a daily basis. The records shall be kept on site for a period of at least 5 years and shall be made available for inspection by District staff upon request. [Cumulative Increase]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-45, S-434 & S-1010**

**Condition No. 22970**

**Plant No. 21359**

**Application No. 31157**

**A. CFEP Project Mass Emission Limits**

1. Following are the sources that are subject to Condition 22970, parts A2, A4, and A.5:  
S45, Heater (U246 B-801 A/B)  
S434, U246 High Pressure Reactor Train (Cracking)  
S1010, U235 Sulfur Recovery Unit  
[Cumulative increase, PSD]
2. The owner/operator shall ensure that the annual emissions of the above sources do not exceed the following annual emission limits, including startup, shutdown, malfunction, and upset emissions.
  - a. NOx 13.5 tpy [Cumulative increase]
  - b. SO2 34.4 tpy [Cumulative increase]
  - c. PM10 2.9 tpy [Cumulative increase, PSD]
  - d. POC 1.9 tpy [Cumulative increase]
  - e. CO 40.72 tpy [Cumulative increase]
  - f. Sulfuric acid mist 6.01 tpy [PSD]
  - \*g. Ammonia 6.35 tpy [BAAQMD Regulation 2, Rule 5]
3. The owner/operator shall ensure that the daily emissions of the CFEP, including source S2 at Facility B7419, do not exceed the following daily emission limit, including startup, shutdown, malfunction, and upset emissions.
  - a. Sulfuric acid mist 38 lb/day [PSD]
4. The owner/operator shall determine whether the emissions are below the allowable emissions in Part A.2, as shown below. The owner/operator shall calculate and report the emissions of NOX, SO2, PM10, POC, CO, and sulfuric acid mist on an annual basis in the following manner.
  - a. For Source S45, Heater
    - i. Use the mass emissions data generated by the NOx CEM at S45.
    - ii. Use the emissions rates determined by semi-annual source tests for CO at S45.
    - iii. Use the emissions rates determined by initial source test for POC, PM10, and sulfuric acid mist at S45.
    - iv. \*Use the emissions rates determined by initial source test for ammonia at S45.
    - v. Use the sulfur analysis of fuel required by Condition 22862, part 11 at S45.  
[Cumulative increase, PSD, BAAQMD Regulation 2, Rule 5]
  - b. For Source S1010, Sulfur Recovery Unit
    - i. Use the mass emissions data generated by the SO2 and CO CEMs at S1010.
    - ii. Use the emissions rates determined by annual source tests for NOx and sulfuric acid mist at S1010.
    - iii. \*Use the emissions rates determined by annual source test for ammonia at S1010.
    - iv. Use the emissions rates determined by initial source test for POC and PM10 at S1010.  
[Cumulative increase, PSD, BAAQMD Regulation 2, Rule 5]
  - c. For the refinery flare S296
    - i. Calculate any emissions caused by venting the contents of any part of the sulfur recovery unit including S1010, A48, and A424 to the refinery flare.
    - ii. Calculate any emissions caused by venting the contents of any part of S434 to a refinery flare.
    - iii. The owner/operator shall calculate any emissions caused by venting the feed to Facility B7419, sources S1 or S2 to the refinery flare.  
[Cumulative increase, PSD, BAAQMD Regulation 2, Rule 5]
5. If the annual emissions, as determined in part 4, are above the allowable emissions in part A.2, the owner/operator shall supply additional offsets, where applicable, and perform additional analysis for PSD, if necessary. The results of the analysis shall be submitted to the Director of Compliance and Enforcement on an annual basis on the anniversary of the startup of S1010 or S434, whichever is earlier. [Offset, PSD]



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-45, S-434 & S-1010**

**Condition No. 22970**

**Plant No. 21359**

**Application No. 31157**

6. The annual emissions of the following sources shall not exceed 16.7 tons PM<sub>10</sub>/yr: S45, S434, and S1010 at Facility A0016, and S2 and S3 at Facility B7419. If the emissions exceed 16.7 tons per year, the owners/operators of Facilities A0016 and B7419 shall provide contemporaneous offsets of PM<sub>10</sub> that comply with BAAQMD Regulations 2-2-201 and 2-2-605. The owners/operators shall use the following data to calculate the annual PM<sub>10</sub> emissions:
- The emissions rate of PM<sub>10</sub> determined by the initial source tests at S45 and S1010 at Facility A0016
  - The emissions rate of PM<sub>10</sub> determined by the initial source test at S2 at Facility B7419
  - The emissions rate of PM<sub>10</sub> calculated for venting the contents of any part of S434 to a refinery flare
  - The emissions rate of PM<sub>10</sub> calculated for venting the contents of any part of S1010, A48, and A424 to a refinery flare
  - The emissions rate of PM<sub>10</sub> calculated for operation of S3, Hydrogen Plant Flare, at Facility B7419

The results of the analysis shall be submitted to the Director of Compliance and Enforcement on an annual basis on the anniversary of the startup of S1010 or S434 at Facility A0016 or S2 at Facility B7419, whichever is earlier. [1-104, 2-2-304]

***End of Conditions***





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-139 & S-140**

**Condition No. 23724**

**Plant No. 21359**

**Application No. 31157**

For Sources S135 (Tank 200), S137 (Tank 202), S139 (Tank 204), S140 (Tank 205), S168 (Tank 269), S173 (Tank 280), S174 (Tank 281), S175 (Tank 284), S182 (Tank 294), S360 (Tank 223), S445 (Tank 271), S449 (Tank 285), S506 (Tank 257), Tank 235, and Tank 236.

This condition was imposed by Application 13424 and amended by Application 16940 in January 2008, Application 13427 in 2009, Application 21706 in 2010, Application 26020 April 2014. Amended by Application 31703 to add daily, annual throughput and emissions (Parts 10 through 13), Application 31157 (2022).

1.
  - a. The owner/operator shall ensure that all sources subject to this permit condition are abated by A7, Vapor Recovery System at all times of operation except for the following sources, which shall be controlled according to the schedule below. The owner/operator shall ensure A7, Vapor Recovery System, shall have at least an overall 98% system control efficiency:  
S168  
S173  
S174  
S506  
S168 shall be abated by A7 and subject to the terms of this condition prior to the startup of S434. S173 and S174 shall be abated when blanketing is required to preserve product or feed. S506 shall be abated by A7 and subject to the terms of this condition upon the date of startup. [Basis: Regulation 2-1-403, Regulation 1-107]
  - b. The owner/operator shall ensure that a fourth compressor is added to A7, Odor Abatement System, before more than two of the following sources are controlled by A7: S168, S173, S174, S175, S506. [Basis: Regulation 2-1-301, 2-1-305, 2-1-403, CEQA]
  - c. The new odor abatement compressor, or a dedicated compressor, shall be designed and installed to supplement G-503, Flare Gas Recovery Compressor. [CEQA]
2. The owner/operator shall ensure that all tanks subject to this permit condition are blanketed by utility-grade natural gas. [Basis: Regulation 2-1-403]
3. By July 5, 2009, the owner/operator shall equip all tanks subject to this permit condition except S506 with District-approved pressure monitoring devices. Upon startup, the owner/operator shall equip S506 with a District-approved pressure-monitoring device. [Basis: Regulation 2-1-403]
4. After the pressure monitoring devices are installed, the owner/operator shall ensure that tanks listed below operate at all times below their respective minimum set pressures, as shown in 4a and 4b of this condition. Any recorded pressure in excess of the minimum pressure shall be reported to the District's Compliance and Enforcement and Engineering Divisions within 10 days of the pressure excess. The owner/operator must conduct an investigation of the incident to determine if the pressure excess resulted in the pressure/vacuum (PV) valve lifting to atmosphere and if so, why there was a pressure excess that resulted in the PV valve lifting to atmosphere. Results of the investigation must be reported to the District's Compliance and Enforcement and Engineering Divisions within 30 days of the initial report. Any recorded pressure in excess of the minimum set pressure shall be considered an indication of a valve lift to atmosphere unless a District approved tell-tale indicator on the PV valve shows that the valve did not lift, or the owner/operator demonstrates to the satisfaction of the APCO that the recorded pressure excess was the result of a monitoring, recording or other malfunction. The minimum set pressure for each storage tank, except S139, S140, S182, S360, S445, S449, must be submitted in a report to the District's Compliance and Enforcement and Engineering Divisions within 21 months of issuance of the Authority to Construct.
  - a. Source Number Minimum Set Pressure (inches H2O)

. 135	1.7
. 137	1.7



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-139 & S-140**

**Condition No. 23724**

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. 139	1.9
. 140	1.9
. 168	1.8
. 182	1.8
. 360	1.9
. 445	1.9
. 449	1.5
. 506	2.2

The owner/operator shall submit an accelerated permit application to include any change to any of the pressures above. Any amendment to the Title V permit to include the pressures above shall be submitted as a minor revision to the Title V permit. [Basis: Regulation 8, Rule 5]

b. Source Number Minimum Set Pressure (inches H<sub>2</sub>O)

. 173	1.8
. 174	1.8
. 175	1.3
. Tank 235	2.2
. Tank 236	2.2

The owner/operator shall submit an accelerated permit application to include any change to any of the pressures above. Any amendment to the Title V permit to include the pressures above shall be submitted as a minor revision to the Title V permit. [Basis: Regulation 2-1-403]

5. The owner/operator shall ensure that each pressure relief valve for each tank must be set at or above its nominal set pressure listed in Part 4 of this permit condition. [Basis: Regulation 2-1-403]

6. Corrective Plan:

The corrective plan is a means for ConocoPhillips to correct occasional exceedances, to stay within the working pressure limits and thus to remain in compliance with District Regulations. If a PV valve has been determined to have lifted three times in a 12 month period, ConocoPhillips shall implement abatement measures to prevent the recurrence of the type of incident which caused the valve to lift. This plan is intended to provide a mechanism for bringing ConocoPhillips back into compliance should a temporary exceedance occur. This plan does not constitute an alternative means of compliance. [Basis: Regulation 2-1-403]

- a. If, during any consecutive 12-month period, more than three instances of a PV valve release to atmosphere attributed to a storage tank subject to this permit condition are reported, ConocoPhillips shall propose a method to correct the exceedance and to ensure compliance with District regulations and permit conditions. The proposed method is subject to approval by the Air Pollution Control Officer. Potential methods include but are not limited to increasing the nominal set pressure of the pressure/vacuum valve, bladder tank(s) for additional short-term vapor storage capacity, dedicated vapor recovery flare, pilot control on pressure relief valves, flow meters on vapor recovery tanks to monitor blanket gas flows, replacement of tanks, and naphtha degassers. [Basis: Regulation 2-1-403]

7. To determine compliance with the above conditions, the owner/operator shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including, but not necessarily limited to the following information:

- a. Pressure measurements from tanks listed in part 4 of this condition. Pressure shall be recorded at least for one-minute interval for each tank, except as allowed in BAAQMD Regulation 1-523 for parametric monitors. The owner/operator shall maintain a reasonable stock of spare parts for the components of the monitoring system to ensure that repairs are completed as quickly as possible.



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-139 & S-140**

**Condition No. 23724**

**Plant No. 21359**

**Application No. 31157**

All records shall be retained on site for five years, from the date of entry and made available for inspection by the District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District regulation. [Basis: Regulation 2-1-403]

8. The requirement to report pressures in excess of the minimum pressure as described in part 4 of this permit condition, shall start on July 5, 2009 for all tanks in this condition except S139, S140, S182, S360, S445, S449. The requirement to report pressures in excess of the minimum pressure as described in part 4 of this permit condition, shall start on January 5, 2008 for the following tanks: S139, S140, S182, S360, S445, S449. [Basis: 2-1-403]
9. The permit to operate is contingent upon compliance with Regulation 1-301, Standard for Public Nuisance, and Regulation 7, Odorous Substances. Upon receipt of a violation for either of these regulations, the Air Pollution Control Officer may require the owner/operator to install additional emission control measures as stated in Part 6 of this permit condition. [Basis: Regulations 1-301, 7-301, 7-302]
10. Deleted. S-360 is exempt from permit during P66 Rodeo Renewed Project upon initial startup under Application 31157.
11. Deleted. S-360 is exempt from permit during P66 Rodeo Renewed Project upon initial startup under Application 31157.
12. Deleted. S-506 is exempt from permit during P66 Rodeo Renewed Project upon initial startup under Application 31157.
13. Deleted. S-506 is exempt from permit during P66 Rodeo Renewed Project upon initial startup under Application 31157.
14. Deleted. S-360 and S-506 are exempt from permit during P66 Rodeo Renewed Project upon initial startup under Application 31157.
15. Deleted. S-360 and S-506 are exempt from permit during P66 Rodeo Renewed Project upon initial startup under Application 31157.

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-324**

**Condition No. 26069**

**Plant No. 21359**

**Application No. 31157**

For Source S-324 (Oil/Water Separator)

1. The owner/operator shall not allow emissions from A-53 to exceed the following emission limits: NO<sub>x</sub> 0.64 lb/hour, CO 1.7 lb/hour. The owner/operator shall operate A-53 to meet the following VOC destruction efficiency requirements:
  - a. A-53 outlet VOC concentration of 10 ppmv or less; or
  - b. All of the following standards depending on the applicable A-53 inlet VOC concentration:
  - c. VOC destruction efficiency  $\geq 98.5\%$  if A-53 inlet VOC concentration  $> 2,000$  ppmv;
  - d. VOC destruction efficiency  $\geq 97\%$  if A-53 inlet VOC concentration  $\leq 2,000$  ppmv;(basis: Cumulative Increase, Regulation 8-8-302.3)
2. The owner/operator shall operate A-53 to be at least 1400 degrees F. The District may adjust this minimum temperature, if source test data demonstrates that an alternate temperature is necessary for or capable of maintaining compliance with Part 2 above. (basis: Cumulative Increase)
3. The temperature limit in Part shall not apply during an "Allowable Temperature Excursion", provided that the temperature controller setpoint complies with the temperature limit. An Allowable Temperature Excursion is one of the following:
  - a. A temperature excursion not exceeding 20 degrees F; or
  - b. A temperature excursion for a period or periods which when combined are less than or equal to 15 minutes in any hour; or
  - c. A temperature excursion for a period or periods which when combined are more than 15 minutes in any hour, provided that all three of the following criteria are met.
    - i. the excursion does not exceed 50 degrees F;
    - ii. the duration of the excursion does not exceed 24 hours; and
    - iii. the total number of such excursions does not exceed 12 per calendar year (or any consecutive 12 month period). Two or more excursions greater than 15 minutes in duration occurring during the same 24-hour period shall be counted as one excursion toward the 12-excursion limit. (basis: Regulation 2-1-403)
4. For each Allowable Temperature Excursion that exceeds 20 degrees F and 15 minutes in duration, the Permit Holder shall keep sufficient records to demonstrate that they meet the qualifying criteria described above. Records shall be retained for a minimum of five years from the date of entry, and shall be made available to the District upon request. Records shall include at least the following information:
  - a. Temperature controller setpoint;
  - b. Starting date and time, and duration of each Allowable Temperature Excursion;
  - c. Measured temperature during each Allowable Temperature Excursion;
  - d. Number of Allowable Temperature Excursions per month, and total number for the current calendar year; and
  - e. All strip charts or other temperature records.(basis: Regulation 2-1-403)
5. To determine compliance with the temperature requirement in these permit conditions, the owner/operator of A-53 shall be equipped with a temperature measuring device capable of continuously measuring and recording the temperature in A-53. The owner/operator shall install, and maintain in accordance with manufacturer's recommendations, a temperature measuring device that meets the following criteria: the minimum and maximum measurable temperatures with the device are 200 degrees F and 1900 degrees F, respectively, and the minimum accuracy of the device over this temperature range shall be 1.0 percent of full-scale. (basis: Cumulative Increase)



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-324**

**Condition No. 26069**

**Plant No. 21359**

**Application No. 31157**

6. Within 90 days of startup of A-53, the owner/operator shall conduct District approved source tests to determine initial compliance with the limits in part 2. The owner/operator shall submit the source test results to the District staff no later than 60 days after the source test. (basis: Cumulative Increase)
7. The owner/operator shall obtain approval for all source test procedures from the District's Source Test Section prior to conducting any tests. The owner/operator shall comply with all applicable testing requirements as specified in Volume V of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test Section, in writing, of the source test protocols and projected test dates at least 7 days prior to testing.  
(basis: Cumulative Increase)
8. The owner/operator of A-53 shall maintain records of hours of operation, oxidizer temperature, and source test results in a District approved log for at least 5 years from the date of entry. These records shall be made available to District staff upon request. (basis: Cumulative Increase, Recordkeeping)

***End of Conditions***





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-307, S-309 & S-434**

**Condition No. 27647**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance): Phillips 66 Rodeo Renewed Project.

S-307 U240 Unicracking Unit

S-434 U246 High Pressure Reactor Train

S-460 U250 Ultra Low Sulfur Diesel Hydrotreater

S-309 U248 Unisar Unit

1. The owner/operator of S-307, S-434 and/or S-460 combined shall not produce more than 67,000 barrels of renewable fuels per day based on a consecutive rolling 12-month period. (Basis: Regulation 2-2-208 Cumulative Increase, CEQA)
2. The owner/operator shall ensure that the combined renewable feedstock throughput of U240 Unicracking Unit (S-307) and U246 High Pressure Reactor Train (S-434) does not exceed 69,000 barrels per calendar day.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-403)
3. The owner/operator shall ensure that the renewable feedstock throughput of U240 Unicracking Unit (S-307) does not exceed 42,000 barrels per calendar day and/or 15,330,000 barrels in any consecutive 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
4. The owner/operator shall ensure that the renewable feedstock throughput of U246 High Pressure Reactor Train (S-434) does not exceed 30,000 barrels per calendar day and/or 9,855,000 barrels in any consecutive 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
5. The owner/operator of U248 Unisar Unit (S-309) shall ensure that the renewable Jet throughput does not exceed 16,740 barrels per calendar day and/or 6,110,100 barrels over any consecutive rolling 12-month period (Basis: Regulation 2-2-208 Cumulative Increase)
6. The owner/operator of all pressure relief devices at S-307 and S-434 shall vent the emissions to a fuel gas recovery system, furnace, or flare with a recovery/destruction efficiency of at least 98% by weight. [8-28-302, BACT]
7. To determine compliance with the above condition(s), the owner/operator shall maintain the following records and provide all of the data necessary to evaluate compliance with the above conditions, including, but not necessarily limited to, the following information:
  - a. On a daily basis, type and amount of renewable feedstock and products processed at each and combined sources (S-307, S-434 and S-460) and amount of feedstock and renewable Jet and other renewable products processed at S-309. The daily amounts of materials shall be totaled on both a monthly and consecutive 12-month period basis.

These records shall be kept on-site for at least 5 years. All records shall be recorded in an Air District approved log and made available for inspection by Air District staff upon request. These recordkeeping Requirements shall not replace the recordkeeping Requirements contained in any applicable Air District Regulations.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 1-441)

### ***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-599, S-1010, A-598, A-599, A-600, & A-601**

**Condition No. 27648**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance): Phillips 66 Rodeo Renewed Project.  
S-599 Sour Water Strippers and Amine Treatment System abated by

U237 Sulfur Treatment Unit (STU-2 trains) consisting of

- A-598 Thermal Oxidizer and A-599 SO<sub>2</sub> Scrubber; and/or
- A-600 Thermal Oxidizer and A-601 SO<sub>2</sub> Scrubber; or

S-1010 SRU Unit 235 (backup unit during emergencies only)

1. The owner/operator shall abate S-599 Amine system and Sour Water Strippers with the properly maintained and properly operated per manufacturer's specifications A-598 Thermal Oxidizer/A-599 SO<sub>2</sub> Scrubber, and/or A-600 Thermal Oxidizer/A-601 SO<sub>2</sub> Scrubber and/or Sulfur Plant Unit 235 (S-1010) at all times. S-1010 shall be used only during planned and unplanned outages of Unit 237 Sulfur Treatment Unit. The planned outage or maintenance is expected to be performed once every three years. The unplanned outages apply only to emergencies.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-5)
2. The owner/operator of A-598 and/or A-600 thermal oxidizers shall each not exceed 7.4 MMBtu/hr of natural gas, and/or 64,824 MMBtu during any consecutive rolling 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase, BACT)
3. The owner/operator of A-599 and/or A-601 shall each not exceed a maximum flowrate of 3,070 DSCFM. The owner/operator of A-599 and/or A-601 shall install, maintain and operate an Air District's approved continuous flow meter on each of the scrubber's exhaust (A-599 and/or A-601).  
(Basis: Regulation 2-2-208 Cumulative Increase, BACT)
4. The owner/operator of A-599 and/or A-601 shall each not exceed
  - a. 150 ppmvd of NO<sub>x</sub> at 3% O<sub>2</sub> (averaged on 1-hour basis) or 0.24 lb/MMBtu
  - b. 90 ppmvd of CO at 3% O<sub>2</sub> (averaged on 1-hour basis) or 0.09 lb/MMBtu
  - c. 50 ppmvd of SO<sub>2</sub> at 3% O<sub>2</sub> (averaged on 1-hour basis) or 0.11 lb/MMBtu
  - d. 3 ppmvd of TOC at 3% O<sub>2</sub> (averaged on 1-hour basis) or 0.0045 lb/MMBtu
  - e. 10 ppmvd of Ammonia at 3% O<sub>2</sub> (averaged on 1-hour basis)
  - f. 2.14 ppmvd of H<sub>2</sub>S at 3% O<sub>2</sub> (averaged on 1-hour basis)
  - g. 167 ppmvd of Sulfuric Acid Mist at 3% O<sub>2</sub> (averaged on 1-hour basis)
  - h. The daily PTE limit for each pollutant shall be calculated based on the maximum firing rate in Part 2 multiplied by the emission factors above (Parts 4a through 4d) or on the concentrations (Parts 4e through 4g) and flow rate in Part 3, based on 24 hours per day of operation

For the purpose of these conditions TOC shall be considered equal to POC and equal to NMOC

(Basis: Regulation 2-2-208 Cumulative Increase, RACT for NO<sub>x</sub> and CO)

5. The owner/operator of each A-599 and/or A-601 shall not exceed any of the following hourly limits from S-599:
  - a. PM<sub>10</sub>/PM<sub>2.5</sub> = Sulfuric acid mist: 0.73 lb/hr for a single stack; and/or 0.95 lb/hr for both stacks combined
  - b. H<sub>2</sub>S: 0.041 lb/hr for a single stack; and/or 0.081 lb/hr for both stacks combined
  - c. NH<sub>3</sub>: 0.095 lb/hr for a single stack; and/or 0.19 lb/hr for both stacks combined
  - d. NO<sub>x</sub>: 1.76 lb/hr for a single stack; and/or 3.5 lb/hr for both stacks combined
  - e. CO: 0.64 lb/hr for a single stack; and/or 1.3 lb/hr for both stacks combined
  - f. TOC: 0.033 lb/hr for a single stack; and/or 0.07 lb/hr for both stacks combined
  - g. SO<sub>2</sub>: 0.81 lb/hr for a single stack; and/or 1.6 lb/hr for both stacks combined

For the purpose of these conditions TOC shall be considered equal to POC and equal to NMOC

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-5)



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-599, S-1010, A-598, A-599, A-600, & A-601**

**Condition No. 27648**

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6. The owner/operator shall ensure that the total emissions, including startups, shutdowns, planned and unplanned outages (as defined in Part 1), and/or malfunctions, from each A-599 and/or A-601, do not exceed any of the following limits per any consecutive rolling 12-month period:
- a. SO<sub>2</sub>: 3.5 tons [Cumulative Increase, BACT]
  - b. NO<sub>x</sub>: 7.7 tons [RACT, Cumulative Increase]
  - c. CO: 2.8 tons [Cumulative Increase, RACT]
  - d. TOC: 0.15 tons (calculate as propane) [Cumulative Increase]
  - e. PM<sub>10</sub>: 3.2 tons [Cumulative Increase, BACT]
  - f. PM<sub>2.5</sub>: 3.2 tons [Cumulative Increase, BACT]
  - g. Sulfuric acid mist: 3.2 tons [Regulation 2, Rule 5]
  - h. H<sub>2</sub>S: 0.178 tons [Regulation 2, Rule 5]
  - i. NH<sub>3</sub>: 0.415 tons [Regulation 2, Rule 5]

For the purpose of these conditions TOC shall be considered equal to POC and equal to NMOC

7. The owner/operator shall ensure that the total emissions, including startups, shutdowns, planned and unplanned outages (as defined in Part 1), and/or malfunctions, from A-599 and A-601 combined, do not exceed any of the following limits per any consecutive rolling 12-month period:
- a. SO<sub>2</sub>: 4.6 tons [Cumulative Increase, Offsets]
  - b. NO<sub>x</sub>: 10 tons for all A-599, A-601 and/or S-1010 (SRU Unit 235) combined [RACT, Cumulative Increase, Offsets]
  - c. CO: 3.6 tons [Cumulative Increase]
  - d. TOC: 0.19 tons (calculate as propane) [Cumulative Increase, Offsets]
  - e. PM<sub>10</sub>: 4.16 tons [Cumulative Increase, Offsets]
  - f. PM<sub>2.5</sub>: 4.16 tons [Cumulative Increase, Offsets]
  - g. Sulfuric acid mist: 4.16 tons [Regulation 2, Rule 5]
  - h. H<sub>2</sub>S: 0.356 tons [Regulation 2, Rule 5]
  - i. NH<sub>3</sub>: 0.829 tons [Regulation 2, Rule 5]

For the purpose of these conditions TOC shall be considered equal to POC and equal to NMOC

8. The owner/operator shall properly operate A-598 and/or A-600 to be at least 2,100 degrees F at the first furnace (Reduction furnace) before abating S-599. The Air District may adjust this minimum temperature, if source test data demonstrates that an alternate temperature is necessary for or capable of maintaining compliance with Parts 4, 5, 6 and 7 above.  
(Basis: Regulation 2-2-208 Cumulative Increase)

9. To determine compliance with the temperature requirement in these permit conditions, the owner/operator shall equip each A-598 and/or A-600 with a temperature measuring device capable of continuously measuring and recording the temperature in each A-598 and/or A-600. The owner/operator shall properly install, properly operate, and properly maintain in accordance with manufacturer's recommendations, a temperature measuring device that meets the following criteria: the minimum and maximum measurable temperatures with the device are 700 degrees F and 3,700 degrees F, respectively, and the minimum accuracy of the device over this temperature range shall be 1.0 percent of full-scale.  
(Basis: Regulation 2-2-208 Cumulative Increase)

10. The owner/operator of A-598 and/or A-600 shall not be subject to the temperature limit in Part 8 during an "Allowable Temperature Excursion", provided that the temperature controller setpoint complies with the temperature limit. An Allowable Temperature Excursion is one of the following:
- a. A temperature excursion not exceeding 20 degrees F; or
  - b. A temperature excursion for a period or periods which when combined are less than or equal to 15 minutes in any hour; or



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-599, S-1010, A-598, A-599, A-600, & A-601**

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- c. A temperature excursion for a period or periods which when combined are more than 15 minutes in any hour, provided that all three of the following criteria are met.
  - i. the excursion does not exceed 50 degrees F;
  - ii. the duration of the excursion does not exceed 24 hours; and
  - iii. the total number of such excursions does not exceed 12 per calendar year (or any consecutive 12-month period).

Two or more excursions greater than 15 minutes in duration occurring during the same 24-hour period shall be counted as one excursion toward the 12-excursion limit.

(Basis: Regulation 2-1-403)

- 11. For each Allowable Temperature Excursion that exceeds 20 degrees F and 15 minutes in duration, the owner/operator shall keep sufficient records to demonstrate that they meet the qualifying criteria described above. Records shall be retained for a minimum of five years from the date of entry, and shall be made available to the Air District upon request. Records shall include at least the following information:
  - a. Temperature controller setpoint;
  - b. Starting date and time, and duration of each Allowable Temperature Excursion;
  - c. Measured temperature during each Allowable Temperature Excursion;
  - d. Number of Allowable Temperature Excursions per month, and total number for the current calendar year; and
  - e. All strip charts or other temperature records.(Basis: Regulation 2-1-403)
- 12. Prior to the commencement of construction, the owner/operator of A-599 and/or A-601 shall submit plans to the Air District's Source Test Division to obtain approval of the design and location of the source test ports. The sample ports shall be installed in accordance with Air District's Manual of Procedures and EPA Method 1. Ports for filterable particulate and PM10 and PM2.5 testing shall be installed. (Regulation 1-501, Regulation 6 Rule 1)
- 13. No later than 90 days from the initial startup of each A-598/599 and annually thereafter, the owner/operator shall conduct Air District-approved source test to determine initial and annual compliance with the limits in Parts 4 and 5. To demonstrate compliance with Parts 4h, 6, and 7, the owner/operator shall record the feed gas (acid and/or amine) and natural gas usage on a daily, monthly, and rolling 12 consecutive month basis in an Air District approved log, in units of MMscf per day, month, and consecutive 12 month period, respectively, and perform emissions calculations for each pollutant identified in Parts 4h, 6, and 7 using the latest approved source test emissions factors, in units of lbs/MMscf multiplied by the feed gas and/or natural gas usage in MMscf per day, month, consecutive 12 month period.

The owner/operator shall submit a proposed source test protocol to the Source Test group at least 30 days before conducting the source test. Within 60 days of the source test, the owner/operator shall submit the results of the source test to the Air District. The owner/operator shall repeat the source test every calendar year afterward. The owner/operator may propose a change in testing frequency after 3 years if the source test results are consistently below 50% of the limits in Parts 4, 5, 6 and/or 7. Written approval by the Air District's Engineering Division shall be received by the owner/operator prior to the change in testing schedule. The owner/operator shall revert to yearly source testing once the source test results exceed 50% of the limits in Parts 4, 5, 6 and/or 7. [BACT, Cumulative Increase; Offsets; Regulation 2, Rule 5]

- 14. No later than 90 days from the initial startup of each A-600/601 and annually thereafter, the owner/operator shall conduct Air District-approved source test to determine initial and annual compliance with the limits in Parts 4 and 5. To demonstrate compliance with Parts 6 and 7, the owner/operator shall record the feed gas (acid and/or amine) and natural gas usage on both a monthly and rolling 12 consecutive month basis in an Air District approved log, in units of MMscf per month and consecutive 12 month period, respectively, and



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perform emissions calculations for each pollutant identified in Parts 6 and 7 using the latest approved source test emissions factors, in units of lbs/MMscf multiplied by the feed gas and/or natural gas usage in MMscf per consecutive 12 month period.

The owner/operator shall submit a proposed source test protocol to the Source Test group at least 30 days before conducting the source test. Within 60 days of the source test, the owner/operator shall submit the results of the source test to the Air District. The owner/operator shall repeat the source test every calendar year afterward. The owner/operator may propose a change in testing frequency after 3 years if the source test results are consistently below 50% of the limits in Parts 4, 5, 6 and/or 7. Written approval by the Air District's Engineering Division shall be received by the owner/operator prior to the change in testing schedule. The owner/operator shall revert to yearly source testing once the source test results exceed 50% of the limits in Parts 4, 5, 6 and/or 7. [BACT, Cumulative Increase; Offsets; Regulation 2, Rule 5]

15. The owner/operator shall properly maintain and properly operate A-599 and/or A-601 SO<sub>2</sub> Scrubbers according to the manufacturer's specification such that the liquid circulation rate shall not be below 120 gallons per minute. The owner/operator of A-599 and/or A-601 shall properly install, properly maintain, properly calibrate and properly operate per manufacturer's specifications an Air District's approved continuous liquid flow meter on each of the SO<sub>2</sub> Scrubber. (Basis: Regulation 2-2-208 Cumulative Increase, BACT)
16. The owner/operator shall properly maintain and properly operate A-599 and/or A-601 SO<sub>2</sub> Scrubbers according to the manufacturer's specification such that the pH shall not be below 6 on a daily average basis (or a value greater than 6, if APCO determines that a larger pH value is necessary to adequately ensure that sulfur dioxide emissions from S-599 and/or A-601 are abated by 97% by weight). The owner/operator shall perform an annual inspection and calibration on the pH meter. (Basis: Regulation 2-2-208 Cumulative Increase, BACT)
17. Within 90 days of the startup of the Sulfur Treatment Unit, the owner/operator of S-599, and A-598 through A-601 shall properly install, properly maintain, properly calibrate and properly operate per manufacturer's specifications, an Air District approved or certified NO<sub>x</sub> continuous emission monitor (CEMS) to demonstrate compliance with Parts 4, 5, 6 and/or 7. The owner/operator of S-599 and A-598 through A-601 shall perform daily calibrations, quarterly audit and annual RATA tests in accordance with Appendix B and F. (Basis: Regulation 2-2-208 Cumulative Increase, BACT, Regulation 1-522)  
  
The NO<sub>x</sub> concentration (150 ppm @ 3% O<sub>2</sub>), lb/MMBtu and lb/hr limits in Parts 4 and 5 of Condition 27648 shall not apply during startup and shutdown events. Startup and shutdowns shall not exceed 36 hours per event. The 36 hour startup period is in addition to the heater's refractory change out (including the dryout/warmup periods), which shall not exceed 60 hours per refractory change out. (Basis: Regulation 2-2-208 Cumulative Increase, BACT)
18. Within 90 days of the startup of the Sulfur Treatment Unit, the owner/operator of S-599 and A-598 through A-601 shall properly install, properly maintain, properly calibrate and properly operate per manufacturer's specifications, an Air District approved or certified SO<sub>2</sub> continuous emission monitor (CEMS) to demonstrate compliance with Parts 4, 5, 6 and/or 7 at all times of operation. The owner/operator of S-599 and A-598 through A-601 shall perform daily calibrations, quarterly audit and annual RATA tests in accordance with Appendix B and F. (Basis: Regulation 2-2-208 Cumulative Increase, BACT, Regulation 1-522)
19. To determine compliance with the above condition(s), the owner/operator shall maintain the following records and provide all of the data necessary to evaluate compliance with the above conditions, including, but not necessarily limited to, the following information:





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-599, S-1010, A-598, A-599, A-600, & A-601**

**Condition No. 27648**

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- a. Date, time, and duration of startups, shutdowns, upsets, and malfunctions from S-599, A-598 through A-601
- b. On a hourly basis, type and amount (DSCF) of gas being burned at A-598 and/or A-600;
- c. Records of the exhaust flow rate at A-598/A-599 and/or A-600/A-601;
- d. Records of all source test results including the measured exhaust flow rate and emission factors at A-598/A-599 and/or A-600/A-601;
- e. Daily and monthly emission calculations based on source test results of Parts 4 and 5, totaled on a consecutive 12 month basis per parts 6 and 7;
- f. Daily records of pH measured three times per day (once per shift, 3 shifts per day) and averaged on a daily basis and liquid circulation rates of A-599 and/or A-601 reading per parts 15 and 16;
- g. Continuous temperature record at A-598 and/or A-600 per Part 8; and
- h. Record of annual inspection and calibration of the pH meter.

These records shall be kept on-site for at least 5 years. All records shall be recorded in an Air District approved log and made available for inspection by Air District staff upon request. These recordkeeping Requirements shall not replace the recordkeeping Requirements contained in any applicable Air District Regulations.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 1-441)

20. When operating S-599 with S-1010 during planned and unplanned outages, as defined in Part 1, the owner/operator of S-599 shall continue to comply with the most stringent requirements of either Conditions 27818 and/or 27648.

(Basis: Regulation 1-107, Regulation 2-2-208 Cumulative increase)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-600, S-612, S-613, S-616, A-622, A-623, A-624, & A-625**

**Condition No. 27649**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance): Phillips 66 Rodeo Renewed Project.

Source S-600 Pretreatment Unit (3 Trains)

S-606 Spent Water Tank

S-612 (2 DAF units)

S-613 (3 Process Tanks)

S-616 (2 Collection Tanks)

All sources above are abated by:

- A-622, Biofilter or A-624 Biofilter; and
  - A-623, Activated Carbon Vessel or A-625, Activated Carbon Vessel
1. The owner/operator of S-600 shall not exceed 80,000 barrels of Renewable Feedstock in any calendar day and/or 29,200,000 barrels in any consecutive rolling 12-month period. (Basis: Regulation 2-2-208 Cumulative Increase)
  2. The owner/operator of S-606 Spent Water Tank shall ensure that throughput does not exceed 576,000 gallons per calendar day and/or 210,240,000 gallons of spent water in any consecutive rolling 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
  3. The owner/operator of S-612 (2 DAF Units) shall ensure the throughput does not exceed 576,000 gallons per calendar day and/or 210,240,000 gallons of wastewater combined for 2 DAF units in any consecutive rolling 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
  4. The owner/operator of S-613 (3 process tanks) shall ensure the throughput does not exceed 576,000 gallons per calendar day and/or 210,240,000 gallons of wastewater combined for 3 tanks in any consecutive rolling 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
  5. The owner/operator of S-616 (2 Collection Tanks) shall ensure the throughput does not exceed 144,000 gallons per calendar day and/or 52,560,000 gallons of wastewater combined for 2 tanks in any consecutive rolling 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
  6. The owner/operator of S-600, Pretreatment Unit shall abate S-600 and its associated equipment (including S-606, S-612, S-613 and S-616) with Biofilter (A-622) or Biofilter (A-624) and Activated Carbon Vessel (A-623) or Activated Carbon Vessel (A-625) at all times when S-600 is in operation. The owner/operator shall properly maintain, properly service and properly operate A-622 through A-624 according to the manufacturer's specifications.  
(Basis: Regulation 2-2-208 Cumulative Increase, Offsets)
  7. The owner/operator of Activated Carbon Vessels A-623 and/or A-625. shall each not exceed a maximum flowrate of 2,200 DSCFM (and/or 4,400 DSCFM combined). The owner/operator of A-623 and/or A-625 shall properly install, properly maintain, properly calibrate and properly operate per manufacturer's specifications, an Air District approved continuous flow meter at the blower's exhaust to the combined stack of the activated carbon vessels (A-623 and/or A-625).  
(Basis: Regulation 2-2-208 Cumulative Increase)



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-600, S-612, S-613, S-616, A-622, A-623, A-624, & A-625**

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8. The owner/operator of S-600 and its associated equipment (including S-606, S-612, S-613 and S-616) shall not exceed 10 ppmv (measured as methane, C1) at the outlet of both Activated Carbon Vessels (A-623 and A-625). (Basis: Regulation 2-2-208 Cumulative Increase)
9. The owner/operator of S-600 and its associated equipment (including S-606, S-612, S-613 and S-616) shall not exceed 2.6 pounds TOC per calendar day and/or 956 pounds TOC per any consecutive rolling 12-month period. For the purpose of these conditions TOC shall be considered equal to POC and equal to NMOC. (Basis: Regulation 2-2-208 Cumulative Increase, Offsets)
10. The owner/operator of S-600 and its associated equipment (including S-606, S-612, S-613 and S-616), and Activated Carbon Vessels A-623 and A-625 shall monitor the daily TOC concentrations with a GC analyzer, flame-ionization detector (FID), or other method approved in writing by the Air Pollution Control Officer at the following locations:
  - a. At the inlet to the carbon vessel
  - b. At the outlet of the carbon vessel(Basis: Regulation 2-2-208 Cumulative Increase)
11. The owner/operator of S-600 shall record these monitor readings in a monitoring log at the time they are taken. The monitoring results shall be used to estimate the frequency of carbon change-out necessary to maintain compliance with Parts 8 and 9 and shall be conducted on a daily basis.  
(Basis: Regulation 2-2-208 Cumulative Increase)
12. The owner/operator of Activated Carbon Vessels A-623 and A-625 shall change out the last carbon vessel with unspent carbon upon detection at its outlet of 10 ppmv (measured as C1).  
(Basis: Regulation 2-2-208 Cumulative Increase)
13. The owner/operator of this source shall maintain the following records for each day of operation of the source:
  - a. Daily amount of throughput at S-600 and its associated equipment (including S-606, S-612, S-613 and S-616), totaled on both a monthly and consecutive 12-month period basis;
  - b. Daily records of the exhaust flow rate at A-623 and/or A-625;
  - c. Daily TOC monitor reading and emission calculations, totaled on a calendar day, monthly, and consecutive 12-month period basis. The daily emission calculation shall be calculated using the outlet concentration from Part 10 multiplied by the actual daily flow rate of both A-623 and A-625 combined and assumed 24 hours of operation per day. The owner/operator of S-600 shall multiply the daily emission by 365 and divide by 2000 to get the tonnage for compliance demonstration with Part 9 above
  - d. Daily TAC emission calculations based on the result of Condition #27646 Part 11 analysis, totaled on both a monthly and consecutive 12-month period basis;
  - e. The hours and times of operation of S-600, A-622, A-623, A-624 and A-625;
  - f. f Daily TOC monitor reading or analysis result for the day of operation they are taken;
  - g. GC and/or FID annual maintenance and calibration records per manufacturer's recommendations; and
  - h. Date, time and the number of carbon vessels removed from service.All measurements, records and data required to be maintained by the owner/operator shall be retained and made available for inspection by the Air District for at least five years following the date the data is recorded  
(Basis: Regulation 2-2-208 Cumulative Increase)
14. The owner/operator of S-600 PTU, A-622, A-623, A-624 and A-625 shall ensure visible particulate emissions from S-600 PTU does not exceed Ringelmann 0.5 or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301.



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-600, S-612, S-613, S-616, A-622, A-623, A-624, & A-625**

**Condition No. 27649**

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(Basis: Regulation 1-301, Regulation 6-1-301 and 6-1-305)

15. The owner/operator of S-600 PTU, A-622 through A-625 shall not discharge any odorous substance which causes the ambient air at or beyond the property line to be odorous.  
(Basis: Regulation 7)
16. The owner/operator of S-600 PTU shall maintain, update and operate the Odor Prevention and Management Plan as reviewed and approved by the County of Contra Costa.  
(Basis: Regulation 2-1-403 Permit Condition, CEQA)
17. The owner/operator shall operate A-622 and/or A-624 Biofilters within the following parametric ranges to ensure compliance with the performance standards specified in Parts 8, 9, 14, and/or 15:
  - a. Daily pH of the biofilter media shall be maintained at minimum 1.5;
  - b. The pressure drop across each biofilter shall be greater than 0.25 inches of water and less than 5 inches of water;
  - c. Each biofilter S-622 and/or A-624 shall maintain a minimum water spray rate of 400 gallons per day.(Basis: Regulation 1-301, Regulation 2-1-403, Regulation 6-1, Cumulative Increase)
18. The owner/operator of A-622 and/or A-624 shall properly install, properly operate, properly calibrate and properly maintain per manufacturer's specifications at A-622 and/or A-624 with the following minimum requirements:
  - a. Follow manufacturer's proposed design and recommended operating, calibrating and maintenance specifications of the pH, flow meter and pressure differential gauge;
  - b. Equip A-622 and/or A-624 with a water drain system. The water drain system shall be controlled by adjusting the water flow rate based on the pH;
  - c. Replace biofilter media at a frequency recommended by the manufacturer;
  - d. Inspect water sprayers, water pumps, and fans daily to ensure that they are operating satisfactorily and consistent with the manufacturer's specifications. The owner/operator shall maintain records of the date and time of inspection, results of inspection, equipment manufacturer's specifications, and record any corrective actions taken;
  - e. Installation of an alarm system that notifies the owner/operator before any parameter in part 17 exceedance occurs.The owner/operator may implement additional measures to ensure that each biofilter A-622 and/or A-624 meets the emission limits, and reduces the odor as required in Parts 8, 9, 14 and 15.  
[Basis: Regulations 1-301, 2-1-403, and 6-1; Cumulative Increase]
19. The owner/operator of A-622 and/or A-624 shall monitor and record in an Air District-approved log the following operating parameters of A-622 and/or A-624:
  - a. The pH of the biofilter media shall be measured and recorded daily using an Air District approved pH meter;
  - b. Pressure drop across each filter shall be measured and recorded on a daily basis;
  - c. Water flow rate across each biofilter shall be measured and recorded on a daily basis;
  - d. Biofilter's condition and integrity shall be assessed visually daily for signs of deterioration;
  - e. pH, flow meter and pressure differential gauge maintenance and calibration records per the manufacturer's recommendation and specifications;
  - f. Document the time when any parameter operates out of range and corrective action.(Basis: Regulations 1-301, 2-1-403, and 6-1; Cumulative Increase)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-602, A-606, A-607, A-608, A-609, A-610, A-611, A-612, A-613, & A-614**

**Condition No. 27650**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance) - Phillips 66 Rodeo Renewed Project.

Source S-602 Filter Aid Storage (9) Silos abated by A-606 through A-614 Baghouses (9), and Truck Unloading/Traffic

1. The owner/operator shall ensure that Source S-602, Filter Aid Storage Silos, are abated by A-606 through A-614, Baghouses at all times when S-602 is in operation.  
(Basis: Cumulative Increase, Offsets, Regulation 6-1-301, 6-1-311.1)
2. The owner/operator of S-602 shall ensure visible particulate emissions from each baghouse (A-606 through A-614) does not exceed Ringelmann 0.5 or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301.  
(Basis: Regulation 1-301, Regulations 2-1-403, 6-1-301, and 6-1-305)
3. The owner/operator of S-602 shall ensure the outlet grain loading for each A-606 through A-614 baghouses does not exceed 0.0015 grain/dscf of PM<sub>10</sub>/PM<sub>2.5</sub> (front and back half).  
(Basis: Regulation 2-2-208 Cumulative Increase)
4. The owner/operator shall ensure the exhaust gas flow rate for each A-606 through A-614 baghouses does not exceed a maximum flow rate of 1,600 dscfm.  
(Basis: Regulation 2-2-208 Cumulative Increase)
5. The owner/operator shall ensure the total throughput of filter aid at S-602 does not exceed 158,016 pounds per calendar day and/or 28,838 tons in any consecutive rolling 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
6. The owner/operator shall equip each A-606 through A-614 Baghouses with an Air District's approved manometer or an Air District approved device for measuring the pressure drop across the baghouse.  
(Basis: Regulation 6-1-301, 6-1-311.1)
7. The owner/operator shall inspect Baghouses, A-A-606 through A-614 weekly to ensure proper operation. The following items shall be checked:
  - a. The pressure drop across the baghouse shall be checked weekly. The pressure drop shall be no lower than 0.5 inches of water and no greater than 6 inches of water;
  - b. The baghouse exhaust shall be checked weekly for evidence of particulate breakthrough. If breakthrough is evident from plume observations, dust buildup near the stack outlet, or abnormal pressure drops, the filter bags shall be checked for any tears, holes, abrasions, and scuffs, and replaced as needed;
  - c. All silos shall be discharged in a timely manner to maintain compliance with 8(a) above;
  - d. The pulsejet, shaker cleaning system shall be maintained and operated at sufficient intervals to maintain compliance with 8(a) above;
  - e. Record the daily type of material and throughput, totaled monthly and consecutive 12-month period;
  - f. Maintain 10% of spare set of bags at all times; and
  - g. manometer or Air District approved pressure differential measurement device shall be calibrated per the manufacturer's specification.  
(Basis: Regulation 2-1-403 Permit Condition)
8. The owner/operator of S-602 shall not exceed 6,428 filter aid delivery truck trips in any consecutive rolling 12-month period.  
(Basis: Regulation 2-1-403 Permit Condition)





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-602, A-606, A-607, A-608, A-609, A-610, A-611, A-612, A-613, & A-614**

**Condition No. 27650**

**Plant No. 21359**

**Application No. 31157**

9. To demonstrate compliance with the above permit conditions, the owner/operator of S-602 shall maintain the following record
  - a. The dates of all inspections, calibrations and all maintenance work including bag replacement for the baghouse
  - b. Daily and monthly hours of operation, totaled on consecutive rolling 12-month period basis
  - c. Daily and monthly number of trucks for filter aid delivery and their delivery time
  - d. Daily and monthly throughput of filter aid, totaled on consecutive rolling 12-month period basis
  - e. Weekly pressure drop readings and any corrective actions taken if non-compliant with part 7
  - f. Records of all source test results include grain loading and baghouse exhaust flow rate
  - g. Daily  $PM_{10}$ ,  $PM_{2.5}$ , and Crystalline Silica emission calculations based on source test results, totaled on a monthly and consecutive 12-month period basis.All record shall be retained on-site for five years, from the date of entry and made available for Air District inspection by Air District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable Air District Regulations.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 1-441)
10. The owner/operator shall not exceed the following limits from S-602 (combined for all 9 baghouses):
  - a.  $PM_{10}/PM_{2.5}$ : 4.4 lbs per calendar day and/or 1,622 lbs per any consecutive 12-month period
  - b. Crystalline Silica: 0.093 lbs per hour and/or 811 lbs per any consecutive 12-month period(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-5)
11. Not later than 60 days from the startup of S-602 and at least once every 2 years thereafter, the owner/operator shall conduct Air District approved source tests to determine compliance with the  $PM_{10}/PM_{2.5}$  limits (including both the condensable and filterable PM), baghouse exhaust flow rate and crystalline silica limits in Parts 4, 5 and 10. The grain loading and flowrate determined in the source test shall be used to determine the compliance with the limits above assuming 24 hours of operation per day and 8760 hours per any consecutive 12 month period. To determine compliance with the Crystalline Silica emission limits above, the owner/operator shall multiply the calculated  $PM_{10}/PM_{2.5}$  emissions with the weight percentage of Crystalline Silica in the filter aid material. The owner/operator shall submit the source test results to the Air District staff no later than 60 days after the source test.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-403 Permit Condition)
12. The owner/operator of S-602 shall comply with all applicable testing requirements as specified in Volume IV of the Air District's Manual of Procedures and EPA Method 1. The owner/operator shall notify the Air District's Source Test Section, in writing, of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to testing.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-403 Permit Condition)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-603, A-615, A-616, A-617, & A-618**

**Condition No. 27651**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance) - Phillips 66 Rodeo Renewed Project.

Source S-603 Polyethylene Removal Filter Aid Day Hoppers (4) abated by A-615 through A-618 Baghouses (4), and Truck Load out Traffic

1. The owner/operator shall ensure that Source S-603, Filter Aid Day Hoppers, are abated by A-615 through A-618, Baghouses at all times when S-603 is in operation. (Basis: Cumulative Increase, Offsets, Regulation 6-1-301, 6-1-311.1)
2. The owner/operator of S-603 shall ensure visible particulate emissions from each day hopper does not exceed Ringelmann 0.5 or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301.  
(Basis: Regulation 1-301, Regulations 2-1-403, 6-1-301, and 6-1-305)
3. The owner/operator shall ensure the outlet grain loading for each A-615 through A-618 baghouses does not exceed 0.002 grain/dscf of PM<sub>10</sub>/PM<sub>2.5</sub> (front and back half).  
(Basis: Regulation 2-2-208 Cumulative Increase)
4. The owner/operator shall ensure the exhaust gas flow rate for each A-615 through A-618 baghouses does not exceed a maximum flow rate of 665 dscfm.  
(Basis: Regulation 2-2-208 Cumulative Increase)
5. The owner/operator shall ensure the total throughput of filter aid at S-603 does not exceed 90,288 pounds per calendar day and/or 16,479 tons in any consecutive rolling 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
6. The owner/operator shall equip each A-615 through A-618 Baghouses with an Air District's approved manometer or an Air District approved device for measuring the pressure drop across the baghouse.  
(Basis: Regulation 6-1-301, 6-1-311.1)
7. The owner/operator shall inspect Baghouses, A-615 through A-618 weekly to ensure proper operation. The following items shall be checked:
  - a. The pressure drop across the baghouse shall be checked weekly. The pressure drop shall be no lower than 0.5 inches of water and no greater than 6 inches of water;
  - b. The baghouse exhaust shall be checked weekly for evidence of particulate breakthrough. If breakthrough is evident from plume observations, dust buildup near the stack outlet, or abnormal pressure drops, the filter bags shall be checked for any tears, holes, abrasions, and scuffs, and replaced as needed;
  - c. All hoppers shall be discharged in a timely manner to maintain compliance with 7(a) above;
  - d. The pulsejet, shaker cleaning system shall be maintained and operated at sufficient intervals to maintain compliance with 7(a) above;
  - e. Record the daily type of material and throughput, totaled monthly and consecutive 12-month period;
  - f. Maintain 10% of spare set of bags at all times; and
  - g. manometer or Air District approved pressure differential measurement device shall be calibrated per the manufacturer's specification.  
(Basis: Regulation 2-1-403 Permit Condition)
8. The owner/operator of S-603 and S-605 shall not exceed a combined 9,038 filter aid removal truck trips in any consecutive rolling 12-month period.  
(Basis: Regulation 2-1-403 Permit Condition)



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-603, A-615, A-616, A-617, & A-618**

**Condition No. 27651**

**Plant No. 21359**

**Application No. 31157**

9. To demonstrate compliance with the above permit conditions, the owner/operator of S-603 shall maintain the following record
  - a. The dates of all inspections, calibrations and all maintenance works including bag replacement for the baghouse
  - b. Daily and monthly hours of operation, totaled on consecutive rolling 12-month period basis
  - c. Daily and monthly number of trucks for filter aid removal and their removal time
  - d. Daily and monthly throughput of filter aid, totaled on consecutive rolling 12-month period basis
  - e. Weekly pressure drop readings and any corrective actions taken if non-compliant with part 7
  - f. Records of all source test results include grain loading and baghouse exhaust flow rate
  - g. Daily PM<sub>10</sub>/PM<sub>2.5</sub> and Crystalline Silica emission calculations based on source test results, totaled on a monthly and consecutive 12-month period basisAll record shall be retained on-site for five years, from the date of entry and made available for Air District inspection by Air District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable Air District Regulations.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 1-441)
10. The owner/operator shall not exceed the following limits from S-603 (combined for all 4 hoppers):
  - a. PM<sub>10</sub>/PM<sub>2.5</sub>: 1.1 lbs per calendar day and/or 400 lbs per any consecutive 12-month period
  - b. Crystalline Silica: 0.0228 lbs per hour and/or 200 lbs per any consecutive 12-month period(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-5)
11. Not later than 60 days from the startup of S-603 and at least once every 2 years thereafter, the owner/operator shall conduct Air District approved source tests to determine compliance with the PM<sub>10</sub>/PM<sub>2.5</sub> limits (including both the condensable and filterable PM), baghouse exhaust flow rate and silica limit in Parts 3, 4 and 10. The grain loading and flowrate determined in the source test shall be used to determine the compliance with the PM<sub>10</sub>/PM<sub>2.5</sub> emissions limits above assuming 24 hours of operation per day and 8760 hours per any consecutive 12-month period. To determine compliance with the Crystalline Silica emission limits above, the owner/operator shall multiply the calculated PM<sub>10</sub>/PM<sub>2.5</sub> emissions with the weight percentage of Crystalline Silica in the filter aid material. The owner/operator shall submit the source test results to the Air District staff no later than 60 days after the source test.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-403 Permit Condition)
12. The owner/operator of S-603 shall comply with all applicable testing requirements as specified in Volume IV of the Air District's Manual of Procedures and EPA Method 1. The owner/operator shall notify the Air District's Source Test Section, in writing, of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to testing.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-403 Permit Condition)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-605, A-619, A-620, & A-621**

**Condition No. 27652**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance) - Phillips 66 Rodeo Renewed Project.

Source S-605 Filter Aid Adsorption Day Hoppers (3) abated by A-619 through A-621 Baghouses (3), and Truck Loadout Traffic

1. The owner/operator shall ensure that Source S-605, Filter Aid Adsorption Day Hoppers, are abated by A-619 through A-621, Baghouses at all times when S-605 is in operation.  
(Basis: Cumulative Increase, Offsets, Regulation 6-1-301, 6-1-311.1)
2. The owner/operator of S-605 shall ensure visible particulate emissions from each day hopper does not exceed Ringlemann 0.5 or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301.  
(Basis: Regulation 1-301, Regulation 6-1-301 and 6-1-305)
3. The owner/operator shall ensure the outlet grain loading for each A-619 through A-621 baghouses does not exceed 0.002 grain/dscf of PM<sub>10</sub>/PM<sub>2.5</sub> (front and back half).  
(Basis: Regulation 2-2-208 Cumulative Increase)
4. The owner/operator shall ensure the exhaust gas flow rate for each A-619 through A-621 baghouses does not exceed a maximum flow rate of 665 dscfm.  
(Basis: Regulation 2-2-208 Cumulative Increase)
5. The owner/operator shall ensure the total throughput of filter aid at S-605 does not exceed 67,728 pounds per calendar day and/or 12,359 tons in any consecutive rolling 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
6. The owner/operator shall equip each A-619 through A-621 Baghouses with an Air District's approved manometer or an approved device for measuring the pressure drop across the baghouse.  
(Basis: Regulation 6-1-301, 6-1-311.1)
7. The owner/operator shall inspect Baghouses A-619 through A-621 weekly to ensure proper operation. The following items shall be checked:
  - a. The pressure drop across the baghouse shall be checked weekly. The pressure drop shall be no lower than 0.5 inches of water and no greater than 6 inches of water;
  - b. The baghouse exhaust shall be checked weekly for evidence of particulate breakthrough. If breakthrough is evident from plume observations, dust buildup near the stack outlet, or abnormal pressure drops, the filter bags shall be checked for any tears, holes, abrasions, and scuffs, and replaced as needed;
  - c. All hoppers shall be discharged in a timely manner to maintain compliance with 7(a) above;
  - d. The pulsejet, shaker cleaning system shall be maintained and operated at sufficient intervals to maintain compliance with 7(a) above;
  - e. Record the daily type of material and throughput, totaled monthly and consecutive 12-month period;
  - f. Maintain 10% of spare set of bags at all times; and
  - g. manometer or Air District approved pressure differential measurement device shall be calibrated per the manufacturer's specification.  
(Basis: Regulation 2-1-403 Permit Condition)
8. To demonstrate compliance with the above permit conditions, the owner/operator of S-605 shall maintain the following record



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-605, A-619, A-620, & A-621**

**Condition No. 27652**

**Plant No. 21359**

**Application No. 31157**

- a. The dates of all inspections, calibrations and all maintenance works including bag replacement for the baghouse
- b. Daily and monthly hours of operation, totaled on a consecutive rolling 12-month period basis
- c. Daily and monthly number of truck for filter aid removal and their removal time per Condition 27651, Part 8.
- d. Daily and monthly throughput of filter aid, totaled on a consecutive rolling 12-month period basis
- e. Weekly pressure drop readings and any corrective actions taken if non-compliant with part 8
- f. Records of all source test results include grain loading and baghouse exhaust flow rate
- g. Daily  $PM_{10}/PM_{2.5}$  and Crystalline Silica emission calculations based on source test results, totaled on a monthly and consecutive 12-month period basis

All record shall be retained on-site for five years, from the date of entry and made available for Air District inspection by Air District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable Air District Regulations.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 1-441)

9. The owner/operator shall not exceed the following limits from S-605 (combined for all 3 hoppers):
  - a.  $PM_{10}/PM_{2.5}$ : 0.82 lbs per calendar day and/or 300 lbs per consecutive 12-month period
  - b. Crystalline Silica: 0.0171 lbs per hour and/or 150 lbs per consecutive 12-month period

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-5)

10. Not later than 60 days from the startup of S-605 and at least once every 2 years thereafter, the owner/operator shall conduct Air District approved source tests to determine initial compliance with the  $PM_{10}/PM_{2.5}$  limits (including both condensable and filterable emissions), baghouse exhaust flow rate and silica limits in Parts 3, 4 and 9. The grain loading and flowrate determined in the source test shall be used to determine the compliance with the emissions limits above assuming 24 hours of operation per day and 8760 hours per any consecutive 12 month period. To determine compliance with the Crystalline Silica emission limits above, the owner/operator shall multiply the calculated  $PM_{10}/PM_{2.5}$  emissions with the weight percentage of Crystalline Silica in the filter aid material. The owner/operator shall submit the source test results to the Air District staff no later than 60 days after the source test.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-403 Permit Condition)

11. The owner/operator shall comply with all applicable testing requirements as specified in Volume IV of the Air District's Manual of Procedures and EPA Method 1. The owner/operator shall notify the Air District's Source Test Section, in writing, of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to testing.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-403 Permit Condition)

***End of Conditions***





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-195**

**Condition No. 27653**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance - Phillips 66 Rodeo Renewed Project) - Established throughputs for S-195 Sludge Sediment Tank (Tank 501).

1. The owner/operator of S-195 shall ensure that the renewable sludge does not exceed 97,928 barrels in any consecutive rolling 12-month period and/or 7,111 barrels in any calendar day.  
(Basis: Regulation 2-2-208 Cumulative Increase)
2. The owner/operator of S-195 may store alternate organic liquid(s) other than the materials specified in Part 1 and/or usages in excess of those specified in Part 1 provided that the owner/operator can demonstrate that all of the following are satisfied:
  - a. Total POC emissions from S-195 do not exceed 0.956 tons in any consecutive rolling twelve-month period and/or 9 pounds in any calendar day;
  - b. Total NPOC emissions from S-195 shall be zero;
  - c. The use of these materials does not increase toxic emissions to equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.(Basis: Regulation 2-2-208 Cumulative Increase; Regulation 2-5 Toxics)
3. To determine compliance with the above parts, the owner/operator of S-195 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:
  - a. Quantities, true vapor pressure and emissions calculations of each type of liquid stored at this source on a daily basis.
  - b. If a material other than those specified in Part 1 is stored, POC and/or NPOC, and toxic component contents of each material used; and Air District approved mass emissions calculations to demonstrate compliance with Part 2, on a daily basis;
  - c. Daily throughput and/or Air District approved emissions calculations shall be totaled for each consecutive twelve-month period.

All records shall be retained on-site for at least five years, from the date of entry, and made available for inspection by Air District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable Air District Regulations. (Basis: Cumulative Increase; Toxics)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-11, S-12, S-13, S-22, S-45, & S-438**

**Condition No. 27654**

**Plant No. 21359**

**Application No. 31157**

Conditions for Combustion sources and SO<sub>2</sub> Cap, except for Gas Turbines, Duct Burners, Engines, and S45, Heater (U246 B801 A/B)

Amended by Rodeo Renewed Project, Application 31157 (2022)

**A. Heater Firing Rate Limits and General Requirements**

1a. Each heater listed below shall not exceed the indicated daily firing rate limit (based on higher heating value of fuel), which are considered maximum sustainable firing rates. The indicated hourly firing rate is the daily limit divided by 24 hours and is the basis for permit fees and is the rate listed in the District database.

District Source Number	Refinery ID Number	Daily Firing Limit (MMbtu/day)	Hourly Firing Rate (MMbtu/hr)
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S7	U231/B103	1,536	64 Condition 27646, part 1
S21	U244/B507	194.4	8.1

[Regulation 2-1-234.3]

1b. Each heater listed below shall not exceed the indicated daily firing rate limit (based on higher heating value of fuel), which are considered maximum sustainable firing rates. The indicated hourly firing rate is the daily limit divided by 24 hours and is the basis for permit fees and is the rate listed in the District database.

District Source Number	Refinery ID Number	Daily Firing Limit (MMbtu/day)	Hourly Firing Rate (MMbtu/hr)
S2	U229/B301	528	22 Condition 27646, part 1
S3	U230/B201	1,272	53 Condition 27646, part 1
S4	U231/B101	2,304	96 Condition 27646, part 1
S5	U231/B102	2,496	104 Condition 27646, part 1
S9	U240/B2	1,464	61 Condition 27646, part 1
S10	U240/B101	5,352	223 Condition 27646, part 1
S11	U240/B201	2,592	108
S12	U240/B202	1,008	42
S13	U240/B301	4,656	194
S15 thru S19	U244/B501 thru B505	5,754	239.75 Condition 27646, part 1
S20	U244/B506	552	23 Condition 27646, part 1
S22	U248/B606	744	31
S29	shutdown A/N 31157 upon startup		
S30	shutdown A/N 31157 upon startup		
S31	U200/B501	480	20 Condition 27646, part 1
S43	U200/B202	5,520	230 Condition 27646, part 1
S44	U200/B201	1,104	46 Condition 27646, part 1
S351	shutdown A/N 31157 upon startup		
S336	U231/B104	2,664	111 Condition 27646, part 1
S337	U231/B105	816	34 Condition 27646, part 1
S371/372	U228/B520 and B521	1,392	58 Condition 27646, part 1

[Regulation 2-1-301]



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-11, S-12, S-13, S-22, S-45, & S-438**

**Condition No. 27654**

**Plant No. 21359**

**Application No. 31157**

1c. Each heater listed below shall not exceed the indicated daily firing rate limit (based on higher heating value of fuel), which are considered maximum sustainable firing rates. The indicated hourly firing rate is the daily limit divided by 24 hours and is the basis for permit fees and is the rate listed in the District database.

District Source Number	Refinery ID Number	Daily Firing Limit (MMbtu/day)	Hourly Firing Rate (MMbtu/hr)
S438	U110	6,000	250
[Cumulative Increase]			

2a. All sources shall use only fuel gas and natural gas as fuel, EXCEPT for S438 which may also use pressure swing adsorption (PSA) off gas as fuel, and EXCEPT for S3 and S7 which may also use naphtha fuel during periods of natural gas curtailment, test runs, or for operator training. [Regulation 9-1-304 (sulfur content), Regulation 2, Rule 1, Consent Decree Case No. 05-0258, DATE: 1/27/05] Amended Application 12931

2b. Deleted.

2c. Deleted.

3a. The fuel gas shall be tested for total reduced sulfur (TRS) concentration by GC analysis at least once per 8 hour shift (3 times per calendar day). At least 90% of these samples shall be taken each calendar month. No readable samples or sample results shall be omitted. TRS shall include hydrogen sulfide, methyl mercaptan, methyl sulfide, dimethyl disulfide. As an alternative to GC TRS analysis, the fuel gas total sulfur content may be measured with a dedicated total sulfur analyzer (Houston Atlas or equivalent), and TRS concentration estimated based on the total sulfur/TRS ratio, with the TRS estimate increased by a 5% margin for conservatism. The total sulfur/TRS ratio shall be determined at least on a monthly basis through GC analyses of total sulfur and TRS values, and the most recent ratio shall be used to estimate TRS concentration.[SO2 Bubble]

3b. The average of the 3 daily fuel gas TRS sample results shall be reported to the District in a table format each calendar month, with a separate entry for each daily average. Sample reports shall be submitted to the District within 30 days of the end of each calendar month. Any omitted sample results shall be explained in this report. [SO2 Bubble]

4. Emissions of SO2 shall not exceed 1,612 lb/day on a monthly average basis from non-cogeneration sources burning fuel gas or liquid fuel. This limit shall not include S45, Heater (U246) and shall not include any engine. [SO2 Bubble]

5. The following records shall be maintained in a District-approved log for at least 5 years and shall be made available to the District upon request:

- Daily and monthly records of the type and amount of fuel combusted at each source listed in Part A.1. [Regulation 2, Rule 1]
- TRS sample results as required by Part A.3 [SO2 Bubble]
- SO2 emissions as required by Part A.4 [SO2 Bubble]
- The operator shall keep records of all visible emission monitoring required by Part 2b, shall identify the person performing the monitoring and shall describe all corrective actions taken [Regulation 2-6-409.2]
- The operator shall keep records of all visible emission monitoring required by Part 2c, of the results of required visual monitoring and Method 9 evaluations on these sources, shall identify the person performing the monitoring and shall describe all corrective actions taken.

[Regulation 2-6-409.2]



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-11, S-12, S-13, S-22, S-45, & S-438**

**Condition No. 27654**

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6. Sources listed below are affected facilities under NSPS Subpart J and are subject to the application requirements of NSPS Subparts A and J for fuel gas combustion devices. [Consent Decree Case No. 05-0258, DATE: 1/27/05]

S2 U229/B301  
S3 U230/B201  
S4 U231/B101  
S5 U231/B102  
S7 U231/B103  
S9 U240/B2  
S10 U240/B101  
S11 U240/B201  
S12 U240/B202  
S13 U240/B301  
S15-S19 U244/B501-B505  
S20 U244/B506  
S21 U244/B507  
S22 U244/B606  
S31 U200/B501

B. S351 Preheater. Deleted. S-351 shutdown in Rodeo Renewed Project, Application 31157 upon startup.

C. S371 and S372 Furnaces (Condition 27646, Part 1)

1. The S371 furnace shall be abated by the A16 SCR unit at all times, and the S372 furnace shall be abated by the A17 SCR unit at all times, except that S371 and S372 may operate without SCR abatement on a temporary basis for periods of planned or emergency maintenance. A District-approved NO<sub>x</sub> CEM shall monitor and record the NO<sub>x</sub> emission rates from these heaters whenever they operate without abatement. All emission limits applicable to S371 and S372 shall remain in effect whether or not they are operated with SCR abatement. [BACT, Cumulative Increase]
2. The concentration of NO<sub>x</sub> from S371 and S372 shall not exceed 20 ppmv, dry, corrected to 3% oxygen, averaged over any consecutive 3 hour period. This limit shall not apply during a startup period, which shall not exceed 12 hours. The startup exemption period may last up to 24 hours to allow the proper ammonia injection temperature to be reached provided that the temperature is monitored at least once per hour and that ammonia injection begins within 2 hours of reaching the proper temperature. This limit shall also not apply during a shutdown period which shall not exceed 9 hours. [BACT, Cumulative Increase]
3. The concentration of CO emissions from S371 and S372 shall not exceed 50 ppmv, dry, corrected to 3% oxygen, averaged over any consecutive 3 hour period. This limit shall not apply during a startup period, which shall not exceed 12 hours. The startup exemption period may last up to 24 hours to allow the proper ammonia injection temperature to be reached provided that the temperature is monitored at least once per hour and that ammonia injection begins within 2 hours of reaching the proper temperature. This limit shall also not apply during a shutdown period, which shall not exceed 9 hours. [BACT, Cumulative Increase]

D. S43 Coking Furnace (Unit 200 B-202) and S44 (Unit 200 B-201 PCT Reboil Furnace) (Condition 27646, Part 1)

1. Nitrogen oxide emissions from the S43 Coking Furnace (Unit 200 B-202) shall be abated by Selective Catalytic Reduction Unit A4 at all times, except that S43 may operate without SCR abatement on a temporary basis for periods of planned or emergency maintenance. A District-approved NO<sub>x</sub> CEM shall



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**Source Nos. S-11, S-12, S-13, S-22, S-45, & S-438**

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monitor and record the S43 NOx emission rate whenever S43 operates without abatement. All emission limits applicable to S43 shall remain in effect whether or not it is operated with SCR abatement. [BACT, Cumulative Increase]

2. The nitrogen oxides in the flue gases for S43, Unit 200 B-202 Coking Furnace and S44, Unit 200 B-201 PCT Reboil Furnace shall not exceed 40 ppm<sub>dv</sub> corrected to 3% oxygen, dry, over any consecutive 8 hour period. This limit shall not apply during a startup period which shall not exceed 12 hours. The startup exemption period may last up to 24 hours to allow the proper ammonia injection temperature to be reached provided that the temperature is monitored at least once per hour and that ammonia injection begins within 2 hours of reaching the proper temperature. This limit shall also not apply during a shutdown period which shall not exceed 9 hours. [BACT, Cumulative Increase]
3. The carbon monoxide in the flue gas for S43, Unit 200 B-202 Coking Furnace and S44, Unit 200 B-201 PCT Reboil Furnace shall not exceed 50 ppm<sub>dv</sub> corrected to 3% oxygen averaged over any calendar month. This condition shall not apply during start-up and shutdown. [BACT, Cumulative Increase]
4. Instruments shall be installed and operated to continuously monitor the percentage of oxygen and the concentration of nitrogen oxides from the following sources: S43, Unit 200 B-202 Coking Furnace and S44, Unit 200 B-201 PCT Reboil Furnace. [BACT, Cumulative Increase]

E. S438 Furnace

1. The S438 furnace shall be abated by the A46 SCR unit at all times, except that S438 may operate without SCR abatement on a temporary basis for periods of planned or emergency maintenance. A District-approved NOx CEM shall monitor and record the S438 NOx emission rate whenever S351 operates without abatement. All emission limits applicable to S438 shall remain in effect whether or not it is operated with SCR abatement. [BACT, Cumulative Increase]
2. Total fuel fired in S438 shall not exceed 2.19 E 12 btu in any rolling consecutive 365 day period. [Cumulative Increase]
3. Pressure swing adsorption (PSA) off gas used as fuel at S438 shall not exceed 1.0 ppm (by weight) total reduced sulfur (TRS). TRS shall include hydrogen sulfide, methyl mercaptan, methyl sulfide, dimethyl disulfide. [BACT, Cumulative Increase]
4. The following emission concentration limits from S438 shall not be exceeded. These limits shall not apply during startup periods not exceeding 24 hours (72 hours when drying refractory or during the first startup following catalyst replacement) and shutdown periods not exceeding 24 hours. The District may approve other startup and shutdown durations.

NOx: 7 ppm<sub>v</sub> @ 3% oxygen, averaged over any 1 hour period

CO: 32 ppm<sub>v</sub> @ 3% oxygen, averaged over any calendar day

POC: 0.0023 lb/MMBtu of fuel used

PM<sub>10</sub> : 0.004 lb/MMBtu of fuel used

[BACT, Cumulative Increase]

5. The concentration of TRS in the blended fuel gas shall not exceed 14 ppm<sub>v</sub> averaged over any calendar month. [SO<sub>2</sub> bubble, Cumulative Increase]
6. Daily records of the type and amount of fuel combusted at S438 and of the TRS and hydrogen sulfide concentration in the blended fuel gas, and monthly records of average blended fuel gas TRS concentration,





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**Source Nos. S-11, S-12, S-13, S-22, S-45, & S-438**

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shall be maintained for at least five years and shall be made available to the District upon request.  
[Cumulative Increase]

7. No later than 90 days from the startup of S438, the owner/operator shall conduct District-approved source tests to determine initial compliance with the limits in Part 4 for NO<sub>x</sub>, CO and POC. The owner/operator shall conduct the source tests in accordance with Part 8. The owner/operator shall submit the source test results to the District staff no later than 60 days after the source test. [BACT, Cumulative Increase]
8. The owner/operator shall obtain approval for all source test procedures from the District's Source Test Section prior to conducting any tests. The owner/operator shall comply with all applicable testing requirements for continuous emissions monitors as specified in Volume V of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test Section, in writing, of the source test protocols and projected test dates at least 7 days prior to testing. [BACT, Cumulative Increase]

**F. S2, S3, S4, S5, S7, S9, S10, S11, S12, S13, Heaters**

1b. Total fuel firing at Unit 240 (S9, S10, S11, S12, and S13) shall not exceed 616.4 MMBtu/hr (based on higher heating value) averaged over any consecutive 12 month period. [Cumulative Increase]

2. Total fuel fired at the MP-30 Complex, including Unit 229 (S2), Unit 230 (S3) and Unit 231 (S4, S5, S7) shall not exceed 346.5 MMBtu/hr (based on higher heating value) averaged over any consecutive 12 month period.  
[Cumulative Increase]

3. Monthly records of the fuel fired at sources in Parts 1 and 2 shall be kept in a District-approved log for at least 5 years and shall be made available the District upon request. [Cumulative Increase]

4. The owner/operator shall not exceed the following NO<sub>x</sub> emission limits as measured by NO<sub>x</sub> CEMs:
- a. S10: 0.015 lb NO<sub>x</sub> per MMBtu heat input based on a 12 consecutive month average.
  - b. S13: 0.015 lb NO<sub>x</sub> per MMBtu heat input based on a 12 consecutive month average.
  - c. S15, S16, S17, S18 and S19 combined: 0.015 lb NO<sub>x</sub> per MMBtu heat input based on a 12 consecutive month average.

[Basis: ConocoPhillips-EPA Consent Decree Case No. H-05-0258]

5. Deleted.

**G. Regulation 9-10 Startup / Shutdown Provisions [Basis: 9-10-301]**

For determining compliance with Regulation 9-10-301, the contribution of each affected unit that is in a startup or shutdown condition shall be based on the methods described in 9-10-301.1, and the contribution of each affected unit that is in an out of service condition shall be based on the methods described in 9-10-301.2. Low-firing conditions (no higher than 20% of a unit's rated capacity), including refractory dryout periods, shall be considered out of service conditions subject to the 30-day averaging procedure in Regulation 9-10-301.2, including the 60-day annual limit for this procedure.

1. Heater S44 (Unit 200, B-201) shall be considered to be in normal operation whenever it has detectable fuel flow, and shall be considered to be out of service for the purpose of Regulation 9-10-301 whenever it has undetectable fuel flow.
2. For heaters S43 (Unit 200, B-202), S351 (Unit 267, B-601/602) and S371/372 (Unit 228, B-520/521), the durations of startups, shutdowns and refractory dryout periods are defined in Condition 1694, Part D.2 (S43), Part B.2 (S351) and Part C.2 (S371, S372).



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**Source Nos. S-11, S-12, S-13, S-22, S-45, & S-438**

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3. For heaters S10 (Unit 240, B-101) and S15 through S19 (Unit 244, B-501 through B-505), the duration of startups, shutdowns and low-firing periods are defined as follows:
  - a. startup and shutdown periods are not to exceed 24 hours
  - b. low-firing periods are not to exceed 72 hours
4. For heater S13 (Unit 240, B-301), the duration of startups, shutdowns and low-firing periods are defined as follows:
  - a. startup and shutdown periods are not to exceed 72 hours
  - b. low-firing periods are not to exceed 72 hours

5. For heaters with no CEMS:

S2 (Unit 229, B-301)

S3 (Unit 230, B-201)

S4 (Unit 231, B-101)

S5 (Unit 231, B-102)

S7 (Unit 231, B-103)

S9 (Unit 240, B-2)

S11 (Unit 240, B-201)

S12 (Unit 240, B-202)

S20 (Unit 244, B-506)

S22 (Unit 248, B-606)

Shutdown in A/N 31157 upon startup

Shutdown in A/N 31157 upon startup

S31 (Unit 200, B-501)

S336 (Unit 231, B-104)

S337 (Unit 231, B-105)

startups, shutdowns, and out of service conditions shall each not exceed 5 days in succession at each source.

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-425, S-426**

**Condition No. 27655**

**Plant No. 21359**

**Application No. 31157**

Conditions For S425, S426, Marine Loading Berths

This condition was amended by Applications 13424, 21342, 22904, 27798, 31703, and 31157 Rodeo Renewed Project (2022).

1. For each loading event of "regulated organic liquid", the owner/operator shall operate A-420 with a temperature of at least 1300 degrees F during the first 15 minutes of the loading operation. After the initial 15 minutes of loading, the A420 temperature shall be at least 1400 degrees F. [Cumulative Increase]
2. The owner/operator of S-425 and/or -426's instruments shall be properly installed and properly maintained per manufacturer's specifications to monitor and record the following:
  - a. Static pressure developed in the marine tank vessel
  - b. A420 temperature.
  - c. Hydrocarbons and flow to determine mass emissions or a concentration measurement alone if it is demonstrated to the satisfaction of the APCO that concentration alone allows verification of compliance, or
  - d. Any other device that verifies compliance, with prior approval from the APCO.[Cumulative Increase]
3. The owner/operator of S-425 and/or S-426 shall not load a "regulated organic liquid" from this facility into a marine tank vessel and/or shall not load any liquid into cargo tank of a marine tank vessel when the tanks' prior cargo was a regulated organic liquid within the District whenever A420 is not fully operational. A420 shall be maintained to be leak free, gas tight, and in good working order. For the purposes of this condition, "operational" shall mean the system is achieving the reductions required by Regulation 8, Rule 44; "regulated organic liquids" include gasoline, gasoline blendstocks, aviation gasoline and JP-4 aviation fuel, renewable naphtha, and crude oil. [Cumulative Increase]
4. The owner/operator of S-425 and/or S-426 shall ensure a leak test shall be conducted on all vessels loading under positive pressure prior to loading more than 20% of the cargo. The leak test shall include all vessel relief valves, hatch cover, butterworth plates, gauging connections, and any other potential leak points. [Cumulative Increase]
5. The owner/operator of S-425 and/or S-426 shall ensure the loading pressure shall not exceed 80% of the lowest relief valve set pressure of the vessel being loaded. [Cumulative Increase]
6. The owner/operator of each S-425 or S-426 and combined S-425 and S-426 shall not load more than the following throughput per day on a 365-day average basis:
  - a. No more than 25,000 barrels of gasoline, gasoline blending stocks, aviation gas, naphtha, renewable naphtha, aviation fuel (JP-4 type), and C5/C6 combined.
    - 25,000 barrels of renewable feedstocks
    - 67,000 barrels of renewable diesel(Basis: Cumulative Increase)
  - i. Deleted Application 13690
  - ii. Deleted Application 31157, lightering is no longer used.
  - b. When A420 is loading regulated materials in accordance with Part 1 above, the owner/operator of S425 and/or S426 shall ensure the maximum loading rate at any time at both S425 and S426 combined shall not exceed 20,000 barrels per hour to prevent overloading the A420 oxidizer. [Cumulative Increase]
7. Deleted per Application 31157, S-425 and S-426 will stop receiving crude oil and gas oil. (Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative increase)



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-425, S-426**

**Condition No. 27655**

**Plant No. 21359**

**Application No. 31157**

8. All throughput records required to verify compliance with Parts 6a and 6b, including hourly loading rate records (total for S425, S426), and maintenance records required for A420, which are subject to Regulation 8, Rule 44, shall be kept on site for at least 5 years and made available to the Air District upon request. [Cumulative Increase]
9. The destruction efficiency of the A420 control system shall be at least 98.5% by weight over each loading event for gasoline, gasoline blending stocks, aviation gas, renewable naphtha, and aviation fuel (JP-4 type). . [BACT]
10. Deleted Application 27798.
11. Deleted Application 27798.
12. Deleted Application 27798.
13. Deleted Application 27798.
14. Deleted Application 22906
15. The owner/operator of each S-425 or S-426 and S-425 and S-426 combined shall not exceed 467 lbs of POC per calendar day, and/or 10.206 tons of POC during any consecutive rolling 12-month period.  
(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative increase)
16. The owner/operator of each S-425 and/or S-426 and S-425 and S-426 combined shall not load more than the following maximum throughput per calendar day:
  - 145,400 barrels of gasoline, gasoline blending stocks, aviation gas, renewable naphtha, and aviation fuel (JP-4 type) combined,
  - 113,100 barrels of renewable feedstocks,
  - 145,400 barrels of renewable diesel(Basis: Regulation 2-2-208 Cumulative Increase)
17. To determine compliance with the above condition(s), the owner/operator shall maintain the following records and provide all of the data necessary to evaluate compliance with the above conditions, including, but not necessarily limited to, the following information:
  - a. Date and time of unloading and loading operations at each S-425 and/or S-426 and for S-425 and S-426 combined
  - b. On a daily basis, type and amount material unloaded and loaded at each S-425 and/or S-426 and for S-425 and S-426 combined;
  - c. Records of all lab analysis and source test results of vapor pressure and emission factors of loading materials at each S-425 and/or S-426 and for S-425 and S-426 combined;
  - d. Hourly records of loading rate per Part 6b;
  - e. Monthly records of the number of tanker and ship deliveries of each material, totaled on a consecutive 12 month basis.

These records shall be kept on-site for at least 5 years. All records shall be recorded in a District approved log and made available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable Air District Regulations.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 1-441)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-449**

**Condition No. 27656**

**Plant No. 21359**

**Application No. 31157**

CONDITIONS FOR S449, TANK (T-285)- Rodeo Renewed Project startup, Application 31157 (2022).

1. The owner/operator shall ensure the emissions from S449 shall be collected and vented to the refinery Vapor Recovery System A-7 or other Air District's approved abatement devices, which provide at least 98% abatement of VOC emissions by weight. [Basis: Cumulative Increase, Regulation 1-107]

***End of Conditions***





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-254, S-256, S-257, & S-338**

**Condition No. 27657**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance - Phillips 66 Rodeo Renewed Project) - Established throughputs for previously grandfathered sources. These sources are no longer grandfathered sources with these established limits.

S-254 Tank No. 1001

S-256 Tank No. 1003

S-257 Tank No. 1004

S-338 U233 Fuel Gas Center

1. The owner/operator of S-254 shall ensure that the gasoline, renewable diesel and renewable jet combined does not exceed 7,257,233 barrels in any consecutive rolling 12-month period and/or 138,362 barrels in any calendar day.  
(Basis: Regulation 2-1-234.1.2, Regulation 2-1-234.2, Regulation 2-1-403 Permit Conditions)
- a. The owner/operator of S-254 may store alternate organic liquid(s) other than the materials specified in Part 1 and/or usages in excess of those specified in Part 1 provided that the owner/operator can demonstrate that all of the following are satisfied:
  - i. Total POC emissions from S-254 do not exceed 2.040 tons in any consecutive rolling twelve month period and/or 21 pounds in any calendar day;
  - ii. Total NPOC emissions from S-254 shall be zero;
  - iii. The use of these materials does not increase toxic emissions to equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.(Basis: Regulation 2-1-234.1.2, Regulation 2-1-234.2, Regulation 2-1-403 Permit Conditions; Regulation 2-5 Toxics)
2. The owner/operator of S-256 shall ensure that the gasoline, renewable diesel and renewable jet combined does not exceed 4,024,700 barrels in any consecutive rolling 12-month period and/or 111,383 barrels in any calendar day.  
(Basis: Regulation 2-1-234.1.2, Regulation 2-1-234.2, Regulation 2-1-403 Permit Conditions)
- a. The owner/operator of S-256 may store alternate organic liquid(s) other than the materials specified in Part 2 and/or usages in excess of those specified in Part 2 provided that the owner/operator can demonstrate that all of the following are satisfied:
  - i. Total POC emissions from S-256 do not exceed 0.303 tons in any consecutive rolling twelve month period and/or 20 pounds in any calendar day;
  - ii. Total NPOC emissions from S-256 shall be zero;
  - iii. The use of these materials does not increase toxic emissions to equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.(Basis: Regulation 2-1-234.1.2, Regulation 2-1-234.2, Regulation 2-1-403 Permit Conditions ; Regulation 2-5 Toxics)
3. The owner/operator of S-257 shall ensure that the gasoline, renewable diesel and/or renewable jet combined does not exceed 3,568,973 barrels in any consecutive rolling 12-month period and/or 42,438 barrels in any calendar day.  
(Basis: Regulation 2-1-234.1.2, Regulation 2-1-234.2, Regulation 2-1-403 Permit Conditions)
- a. The owner/operator of S-257 may store alternate organic liquid(s) other than the materials specified in Part 3 and/or usages in excess of those specified in Part 3 provided that the owner/operator can demonstrate that all of the following are satisfied:
  - i. Total POC emissions from S-257 do not exceed 0.178 tons in any consecutive rolling twelve month period and/or 6 pounds in any calendar day;
  - ii. Total NPOC emissions from S-257 shall be zero;



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-254, S-256, S-257, & S-338**

**Condition No. 27657**

**Plant No. 21359**

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- iii. The use of these materials does not increase toxic emissions to equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.  
(Basis: Regulation 2-1-234.1.2, Regulation 2-1-234.2, Regulation 2-1-403 Permit Conditions; Regulation 2-5 Toxics)
4. The owner/operator of S-338 shall ensure that the fuel gas throughput does not exceed 10,015 MMscf in any consecutive rolling 12-month period and/or 31.77 MMscf in any calendar day.  
(Basis: Regulation 2-1-234.1.2, Regulation 2-1-234.2, Regulation 2-1-403 Permit Conditions)
5. To determine compliance with the above condition(s), the owner/operator of S-254, S-256, S-257 and/or S-338 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above conditions, including, but not necessarily limited to, the following information:
  - a. Daily and monthly record of the type, amount of throughput and emission calculations (for POC, NPOC and/or TACs, if required) at each source, totaled on a rolling 12-month period

These records shall be kept on-site for at least 5 years. All records shall be recorded in an Air District approved log and made available for inspection by Air District staff upon request. These recordkeeping Requirements shall not replace the recordkeeping Requirements contained in any applicable Air District Regulations.

(Basis: Regulation 2-1-234.1.2, Regulation 2-1-234.2, Regulation 2-1-403 Permit Conditions, Regulation 1-441)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-307, S-318, S-322, S-434, S-437, S-599, & S-600**

**Condition No. 27658**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance): Phillips 66 Rodeo Renewed Project.

Conditions for Fugitive Components installed as part of the Rodeo Renewed Project:

S-307 U240

S-322 U40

S-434 U246

S-437 U110

S-599 Sulfur Treatment Unit

S-600 Pretreatment Unit

S-318 U76

1. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall install only the following types of valves: (1) bellows sealed, (2) live loaded, (3) graphitic packed, and/or (4) quarter-turn (e.g., ball valves or plug valves), or equivalent as determined by the APCO.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-301 BACT, Regulation 2-2-302 Offsets)
2. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall comply with a leak standard of 100 ppm of Total Organic Compounds (TOC) measured as C1 at any valve installed unless the owner/operator complies with the applicable leak minimization and repair provisions contained in Regulation 8-18. All valves shall be subject to the Part 17 inspection frequency.  
(Basis: Regulation 2-2-301 BACT)
3. The owner/operator of, S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall install graphitic-based gaskets on all flanges or connectors (gasketed) or equivalent as determined by the APCO. (Basis: Regulation 2-2-301 BACT)
4. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall comply with a leak standard of 100 ppm of TOC (measured as C1) at any flanges/connectors unless the owner/operator complies with the applicable leak minimization and repair provisions contained in Regulation 8-18. All flanges/connectors shall be subject to the Part 17 inspection frequency. (Basis: Regulation 2-2-301 BACT)
5. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall install double mechanical seals w/ barrier fluid; magnetically coupled pumps; canned pumps; magnetic fluid sealing technology; seal system with leakage vented to thermal oxidizer; or other BAAQMD approved equivalent control device; or Air District approved control technology as determined by the APCO on all new/replaced pumps. All pumps shall be subject to the Part 17 inspection frequency. (Basis: Regulation 2-2-301 BACT)
6. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 (58 pumps at 100 ppmv) and/or S-318 shall comply with a leak standard of 100 ppm of TOC (measured as C1) at any pump unless the owner/operator complies with the applicable leak minimization and repair provisions contained in Regulation 8-18. (Basis: Regulation 2-2-301 BACT)
7. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall install double mechanical seals w/ barrier fluid; or gas seal system vented to a thermal oxidizer or other BAAQMD approved control device; or Air District approved control technology as determined by the APCO on all new/replaced compressors. All compressors shall be subject to the Part 17 inspection frequency.  
(Basis: Regulation 2-2-301 BACT)



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-307, S-318, S-322, S-434, S-437, S-599, & S-600**

**Condition No. 27658**

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8. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall comply with a leak standard of 100 ppm of TOC (measured as C1) at any compressor unless the owner/operator complies with the applicable leak minimization and repair provisions contained in Regulation 8-18.  
(Basis: Regulation 2-2-301 BACT)
9. The owner/operator shall implement the following for each new and/or replaced pressure vapor relief device (PRD) installed at S-307, S-434 and/or S-437 abated by the A-7 fuel gas system, furnace, or flare with a minimum capture and destruction efficiency of at least 98% by weight.
  - a. The owner/operator shall operate an Air District approved continuous monitoring system that detects PRD discharges to the fuel gas recovery system or flare. Acceptable monitoring methods include, but are not limited to, continuous pressure, temperature, flow, or molecular weight measurement provided that the monitoring type is Air District approved.
  - b. When a PRD discharge is detected and the PRD does not reseal, the owner/operator shall attempt to reseal, repair and/or replace the PRD as soon as possible while taking into account both safety and feasibility concerns. If the owner/operator determines, subject to Air District verification, the PRD cannot be safely resealed, repaired and/or replaced without causing a process unit or equipment shutdown, the owner/operator shall repair or replace the PRD at the next planned process unit turnaround.
  - c. No later than 90 days before the startup of any equipment of the Rodeo Renewed Project, the owner/operator shall develop and maintain a Pressure Relief Device (PRD) Leak Detection and Troubleshooting Guideline that details the site-specific response procedures that will be employed to minimize PRD discharge as much as practicable. The Guideline shall be made available to the Air District for inspection.
  - d. To determine compliance with the above conditions, the owner/operator of S- S-307, S-434 and/or S-437 shall maintain the following records and provide all of the data necessary to evaluate compliance with condition b:
    - i. Date of each PRD discharge detected that does not reseal ;
    - ii. Date of final repair or replacement;
    - iii. List of each PRD in which repair has been delayed to the next planned process unit turnaround;
    - iv. Reason for non-repairable determination; and
    - v. Documentation of any safety and/or feasibility concerns associated with any repair or replacement.

(Basis: Regulation 2-2-301 BACT, Regulation 8-18-301 Leaks, Regulation 8-28 Episodic Releases, Regulation 2-5 Toxics)
10. The owner/operator shall implement the following for each new and/or replaced liquid pressure relief device (PRD) installed at S-600 connected to the process drain and recycled back to the inlet of S-600.
  - a. The owner/operator shall operate an Air District approved continuous monitoring system that detects PRD discharges. Acceptable monitoring methods include, but are not limited to, continuous pressure, temperature, flow, or liquid level provided that the monitoring type is Air District approved.
  - b. When a PRD discharge is detected and the PRD does not reseal, the owner/operator shall attempt to reseal, repair and/or replace the PRD as soon as possible while taking into account both safety and feasibility concerns. If the owner/operator determines, subject to Air District verification, the PRD cannot be safely resealed, repaired and/or replaced without causing a process unit or equipment shutdown, the owner/operator shall repair or replace the PRD at the next planned process unit turnaround.
  - c. No later than 90 days before the startup of any equipment of the Rodeo Renewed Project, the owner/operator shall develop and maintain a Pressure Relief Device (PRD) Leak Detection and Troubleshooting Guideline that details the site-specific response procedures that will be employed to



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-307, S-318, S-322, S-434, S-437, S-599, & S-600**

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minimize PRD discharge as much as practicable. The Guideline shall be made available to the Air District for inspection.

- d. To determine compliance with the above conditions, the owner/operator of S-600 shall maintain the following records and provide all of the data necessary to evaluate compliance with condition b:
- i. Date of each PRD discharge detected that does not reseal;
  - ii. Date of final repair or replacement;
  - iii. List of each PRD in which repair has been delayed to the next planned process unit turnaround;
  - iv. Reason for non-repairable determination; and
  - v. Documentation of any safety and/or feasibility concerns associated with any repair or replacement.

(Basis: Regulation 2-2-301 BACT, Regulation 8-18-301 Leaks, Regulation 8-28 Episodic Releases, Regulation 2-5 Toxics)

11. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall identify all new/replaced valves, connectors, pressure relief devices, compressors, and pumps with a unique permanent identification code and shall include all new/replaced fugitive equipment in the fugitive equipment monitoring and repair program. The owner/operator shall monitor all repaired equipment within 24 hours of the repair. The unique permanent identification code does not apply to quarter-inch or less tubing and connectors associated with analytical sampling systems. (Basis: Regulation 8-18-402 Identification)
12. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 has been permitted to install new and/or replace the following number of TOC service fugitive components for the Rodeo Renewed Project:
- 3,929 valves
  - 12,617 connectors
  - 161 PSV's/PRV's
  - 3 process drains
  - 223 pumps

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 2-5 Toxics)

13. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall not exceed 10.421 tons per year of TOC emissions (measured as C1) from all fugitive component counts installed in Part 12. Compliance with this provision shall be verified quarterly using methods described in Part 15. The results shall be submitted to the Air District within 30 days of the close of each calendar quarter after commencing with start-up of the system. The owner/operator shall keep records of fugitive component counts (including the unique permanent identification codes) and corresponding TOC emissions for at least five years from date of entry. For the purposes of these conditions POC/NMOC emissions shall be considered equal to the TOC emissions are determined by the Regulations 2-2 and 8-18 LDAR program. (Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 2-5 Toxics, Regulation 8-18)
14. Within 30 days of the completion of the installation of all fugitive components for each subpart in Part 12, the owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall submit a final component counts for each source, final component counts for the Rodeo Renewed Project, and TOC emissions estimate using the approved methods within these conditions to the Air District. Any new and/or replaced components shall be included as installed. If any of the fugitive component counts exceed or is less than a count stated above, the plant's cumulative increase emissions shall be adjusted as needed, subject to APCO approval, to reflect only the difference between emissions based on predicted component counts versus actual component counts. The amount of refund or additional offsets shall be





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-307, S-318, S-322, S-434, S-437, S-599, & S-600**

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handled or provided before issuance of the permit to operate. (Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 8-18)

15. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall calculate fugitive emissions utilizing only Air District approved methods. For all components, the owner/operator shall use the California Air Pollutant Control Officers Association (CAPCOA) correlation equations, midpoint method, default zero factors, 10,000 ppm pegged factors and/or other method approved by the Air District. The owner/operator shall include emissions estimates from all fugitive components associated with this application in order to demonstrate compliance with Parts 13 and 18 through 24. The quarterly fugitive emissions calculations shall start upon installation of any new/replaced components identified in part 12 with the results being submitted to the Air District within 30 days of the close of each quarter. (Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-301 BACT, Regulation 2-2-302 Offsets, Regulation 8-18)
16. Not more than 180 days after the start-up of S S-307, S-322, S-434, S-437, and/or S-318, the owner/operator shall provide the Air District's Engineering Division with toxic emissions calculations based on the final count of fugitive components and the renewable feedstocks and products for removed, replaced and installed fugitive components. The owner/operator shall ensure that the weighted toxicity for fugitive components for each source is not increased above the pre-project emissions levels authorized under the permit Application 31157 at the time of issuance. (Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)
17. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall conduct inspections of fugitive components of these conditions in accordance with the frequency below:

Valves:	Quarterly
Connectors:	Biannual (twice a year)
Flanges:	Biannual (twice a year)
Pressure Relief Valves:	Quarterly
Compressors:	Quarterly
Pumps:	Quarterly
Process Drains:	Quarterly

(Basis: Regulation 2-2-301 BACT)
18. The owner/operator of S-307 (Unit 240) has been permitted for the following total number of TOC service fugitive components:
  - 5,725 valves
  - 9,880 connectors
  - 56 PSV's/PRV's
  - 390 others
  - 54 pumps

Source S-307 may exceed the component counts specified above provided that both the emissions from all fugitive components added and/or replaced qualify for the exemption under Regulation 2-1-128.21. The owner/operator of S-307 shall submit an application to update the fugitive counts above, to update the mass emission limits both above (Part 13) and the paragraph below, to confirm that BACT has been satisfied, and to provide offsets for the new/replaced components. The potential to emit of the added and/or replaced fugitive components shall be calculated according to Regulation 8-18 requirement and shall be used to determine the offsets due. The application shall be submitted to the Air District by the end of January for the previous calendar year's component counts added and/or replaced. Any new and/or replaced components shall be included and reported as required by Parts 15 and/or 16.



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**Source No. S-307, S-318, S-322, S-434, S-437, S-599, & S-600**

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The owner/operator of S-307 shall not exceed 56.6lbs per day and/or 10.327 tons per year of TOC emissions (measured as C1) from all fugitive components included in the above counts. Compliance with this provision shall be verified quarterly using methods described in Part 15. The results shall be submitted to the Air District within 30 days of the close of each calendar quarter after commencing with start-up of any equipment included as part of Application 31157. The owner/operator shall keep records of fugitive component counts, unique identification numbers, and corresponding TOC emissions for at least five years from date of entry. For the purposes of these conditions POC/NMOC emissions shall be considered equal to the TOC emissions are determined by the Regulations 2-2 and 8-18 LDAR program. (Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 8-18)

19. The owner/operator of S-322 (Unit 40) has been permitted for the following total number of TOC service fugitive components:
- 2,707 valves
  - 3,226 connectors
  - 135 PSV's/PRV's
  - 236 others
  - 40 pumps

Source S-322 may exceed the component counts specified above provided that both the emissions from all fugitive components added and/or replaced qualify for the exemption under Regulation 2-1-128.21. The owner/operator of S-322 shall submit an application to update the fugitive counts above, to update the mass emission limits both above (Part 13) and the paragraph below, to confirm that BACT has been satisfied, and to provide offsets for the new/replaced components. The potential to emit of the added and/or replaced fugitive components shall be calculated according to Regulation 8-18 requirement and shall be used to determine the offsets due. The application shall be submitted to the Air District by the end of January for the previous calendar year's component counts added and/or replaced. Any new and/or replaced components shall be included and reported as required by Parts 15 and/or 16.

The owner/operator of S-322 shall not exceed 28.3lbs per day and/or 5.167 tons per year of TOC emissions (measured as C1) from all fugitive components included in the above counts. Compliance with this provision shall be verified quarterly using methods described in Part 15. The results shall be submitted to the Air District within 30 days of the close of each calendar quarter after commencing with start-up of any equipment covered by Application 31157. The owner/operator shall keep records of fugitive component counts, unique identification numbers, and corresponding TOC emissions for at least five years from date of entry. For the purposes of these conditions the TOC emissions are determined by the Regulations 2-2 and 8-18 LDAR program.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 8-18)

20. The owner/operator of S-434 (U246) has been permitted for the following total number of TOC service fugitive components:
- 2,687 valves
  - 3,607 connectors
  - 24 PSV's/PRV's
  - 217 others
  - 18 pumps

Source S-434 may exceed the component counts specified above provided that both the emissions from all fugitive components added and/or replaced qualify for the exemption under Regulation 2-1-128.21. The owner/operator of S-434 shall submit an application to update the fugitive counts above, to update the mass emission limits both above (Part 13) and the paragraph below, to confirm that BACT has been satisfied, and to provide offsets for the new/replaced components. The potential to emit of the added and/or replaced



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fugitive components shall be calculated according to Regulation 8-18 requirement and shall be used to determine the offsets due. The application shall be submitted to the Air District by the end of January for the previous calendar year's component counts added and/or replaced. Any new and/or replaced components shall be included and reported as required by Parts 15 and/or 16.

The owner/operator of S-434 shall not exceed 23.3lbs per day and/or 4.241 tons per year of TOC emissions (measured as C1) from all fugitive components included in the above counts. Compliance with this provision shall be verified quarterly using methods described in Part 15. The results shall be submitted to the Air District within 30 days of the close of each calendar quarter after commencing with start-up of any equipment included as part of Application 31157. The owner/operator shall keep records of fugitive component counts, unique identification numbers, and corresponding TOC emissions for at least five years from date of entry. For the purposes of these conditions POC/NMOC emissions shall be considered equal to the TOC emissions are determined by the Regulations 2-2 and 8-18 LDAR program.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 8-18)

21. The owner/operator of S-437 (U110) has been permitted for the following total number of TOC service fugitive components:

- 981 valves
- 1,470 connectors
- 23 PSV's/PRV's
- 108 others
- 2 pumps

Source S-437 may exceed the component counts specified above provided that both the emissions from all fugitive components added and/or replaced qualify for the exemption under Regulation 2-1-128.21. The owner/operator of S-437 shall submit an application to update the fugitive counts above, to update the mass emission limits both above (Part 13) and the paragraph below, to confirm that BACT has been satisfied, and to provide offsets for the new/replaced components. The potential to emit of the added and/or replaced fugitive components shall be calculated according to Regulation 8-18 requirement and shall be used to determine the offsets due. The application shall be submitted to the Air District by the end of January for the previous calendar year's component counts added and/or replaced. Any new and/or replaced components shall be included and reported as required by Parts 15 and/or 16.

The owner/operator of S-437 shall not exceed 9.0 lbs per day and/or 1.641 tons per year of TOC emissions (measured as C1) from all fugitive components included in the above counts. Compliance with this provision shall be verified quarterly using methods described in Part 15. The results shall be submitted to the Air District within 30 days of the close of each calendar quarter after commencing with start-up of any equipment covered by Application 31157. The owner/operator shall keep records of fugitive component counts, unique identification numbers, and corresponding TOC emissions for at least five years from date of entry. For the purposes of these conditions POC/NMOC emissions shall be considered equal to the TOC emissions are determined by the Regulations 2-2 and 8-18 LDAR program.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 8-18)

22. The owner/operator of S-599 (STU) has been permitted for the following total number of TOC service fugitive components:

- 280 valves
- 1,120 connectors

Source S-599 may exceed the component counts specified above provided that both the emissions from all fugitive components added and/or replaced qualify for the exemption under Regulation 2-1-128.21. The owner/operator of S-599 shall submit an application to update the fugitive counts above, to update the mass



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emission limits both above (Part 13) and the paragraph below, to confirm that BACT has been satisfied, and to provide offsets for the new/replaced components. The potential to emit of the added and/or replaced fugitive components shall be calculated according to Regulation 8-18 requirement and shall be used to determine the offsets due. The application shall be submitted to the Air District by the end of January for the previous calendar year's component counts added and/or replaced. Any new and/or replaced components shall be included and reported as required by Parts 15 and/or 16.

The owner/operator of S-599 shall not exceed 3.74 lbs per day and/or 0.682 tons per year of TOC emissions (measured as C1) from all fugitive components included in the above counts. Compliance with this provision shall be verified quarterly using methods described in Part 15. The results shall be submitted to the Air District within 30 days of the close of each calendar quarter after commencing with start-up of any equipment included as part of Application 31157. The owner/operator shall keep records of fugitive component counts, unique identification numbers, and corresponding TOC emissions for at least five years from date of entry. For the purposes of these conditions POC/NMOC emissions shall be considered equal to the TOC emissions are determined by the Regulations 2-2 and 8-18 LDAR program.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 8-18)

23. The owner/operator of S-600 (PTU) has been permitted for the following total number of TOC service fugitive components:
- 3,049 valves
  - 9,144 connectors
  - 156PSV's/PRV's
  - 212 pumps (154 pumps at 50 ppmv, 58 pumps at 100 ppmv)

Source S-600 may exceed the component counts specified above provided that both the emissions from all fugitive components added and/or replaced qualify for the exemption under Regulation 2-1-128.21. The owner/operator of S-600 shall submit an application to update the fugitive counts above, to update the mass emission limits both above (Part 13) and the paragraph below, to confirm that BACT has been satisfied, and to provide offsets for the new/replaced components. The potential to emit of the added and/or replaced fugitive components shall be calculated according to Regulation 8-18 requirement and shall be used to determine the offsets due. The application shall be submitted to the Air District by the end of January for the previous calendar year's component counts added and/or replaced. Any new and/or replaced components shall be included and reported as required by Parts 15 and/or 16.

The owner/operator of S-600 shall not exceed 44.68 lbs per day and/or 8.154 tons per year of TOC emissions (measured as C1) from all fugitive components included in the above counts. Compliance with this provision shall be verified quarterly using methods described in Part 15. The results shall be submitted to the Air District within 30 days of the close of each calendar quarter after commencing with start-up of any equipment included as part of Application 31157. The owner/operator shall keep records of fugitive component counts, unique identification numbers, and corresponding TOC emissions for at least five years from date of entry. For the purposes of these conditions the TOC emissions are determined by the Regulations 2-2 and 8-18 LDAR program.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 8-18)

24. The owner/operator of S-318 (Unit 76) has been permitted for the following total number of TOC service fugitive components:
- 3,314 valves
  - 5,814 connectors
  - 120 PSV's/PRV's
  - 214 others
  - 49 pumps



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-307, S-318, S-322, S-434, S-437, S-599, & S-600**

**Condition No. 27658**

**Plant No. 21359**

**Application No. 31157**

Source S-318 may exceed the component counts specified above provided that both the emissions from all fugitive components added and/or replaced qualify for the exemption under Regulation 2-1-128.21. The owner/operator of S-318 shall submit an application to update the fugitive counts above, to update the mass emission limits both above (Part 13) and the paragraph below, to confirm that BACT has been satisfied, and to provide offsets for the new/replaced components. The potential to emit of the added and/or replaced fugitive components shall be calculated according to Regulation 8-18 requirement and shall be used to determine the offsets due. The application shall be submitted to the Air District by the end of January for the previous calendar year's component counts added and/or replaced. Any new and/or replaced components shall be included and reported as required by Parts 15 and/or 16.

The owner/operator of S-318 shall not exceed 58.8 lbs per day and/or 6.847 tons per year of TOC emissions (measured as C1) from all fugitive components included in the above counts. Compliance with this provision shall be verified quarterly using methods described in Part 14. The results shall be submitted to the Air District within 30 days of the close of each calendar quarter after commencing with start-up of any equipment included as part of Application 31157. The owner/operator shall keep records of fugitive component counts, unique identification numbers, and corresponding TOC emissions for at least five years from date of entry. For the purposes of these conditions POC/NMOC emissions shall be considered equal to the TOC emissions are determined by the Regulations 2-2 and 8-18 LDAR program.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 8-18)

25. The owner/operator of 154 pumps at S-600 (PTU) may or may not initially install double mechanical seals w/ barrier fluid; magnetically coupled pumps; canned pumps; magnetic fluid sealing technology; seal system with leakage vented to thermal oxidizer; or other BAAQMD approved equivalent control device; or Air District approved control technology as determined by the APCO on all pumps. The owner/operator shall install mechanical seals or Air District approved equivalent technology on all 154 pumps.

The owner/operator of S-600 shall identify the 154 pumps with a unique permanent identification code and shall include in the fugitive equipment monitoring and repair program.

All pumps shall be subject to the Part 17 inspection frequency. The 154 pumps that are not a type listed in Part 5 and for which a leak greater than 50 ppm (measured as C1) has been determined, and if the leak remains greater than 50 ppm (measured as C1) after repair, or if the pump is determined to have a leak greater than 50 ppm (measured as C1) a second time within a 5-year period, then the owner/operator shall install the pump with a type listed in Part 5.

(Basis: Cumulative increase, Regulation 2-2-301 BACT)

26. The owner/operator of the 154 pumps at S-600 that are in heavy liquid service shall comply with a leak standard of 50 ppm of TOC (measured as C1) at any pump unless the owner/operator complies with the applicable leak minimization and repair provisions below.
- Leak minimization includes but is not limited to reducing the leak to the lowest achievable level using best modern practices and without shutting down the process the pump serves. If the leak has been discovered by the operator, minimized within 24 hours and repaired within 7 days or if the leak has discovered by the APCO, the leak must be repaired within 24 hours.
  - Leak repair is tightening, adjustment, addition of material, or the replacement of the equipment using best modern practices, which reduces the leakage to the atmosphere below 50 ppm of TOC.

(Basis: Cumulative increase, Regulation 2-2-301 BACT)

### ***End of Conditions***





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-11, S-12, S-13, S-22, S-45, S-101, S-352, S-353, S-354, S-355, S-356, S-357, & S-438**

**Condition No. 27659**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance): Phillips 66 Rodeo Renewed Project.

S-11 U240 B-201 Heater  
S-12 U240 B-202 Heater  
S-13 U240 B-301 Heater  
S-22 U248 B-606 Heater  
S-45 U246 B-801 A/B Heater  
S-352 Combustion Turbine (16.6 MW)  
S-353 Combustion Turbine (16.6 MW)  
S-354 Combustion Turbine (16.6 MW)  
S-355 Supplement Duct Burner  
S-356 Supplement Duct Burner  
S-357 Supplement Duct Burner  
S-438 U110\_H-1 Furnace (H2 Plant Reforming)

1. The owner/operator of S-11, S-12, S-13, S-22, S-352, S-353, S-354, S-355, S-356, and/or S-357 shall not burn any fuel gas having Total Sulfur (TS) greater than 432 ppmv in any consecutive rolling 12-month average. The owner/operator of S-11, S-12, S-13, S-22, S-45, S-352, S-353, S-354, S-355, S-356, S-357, and/or S-438 shall not burn any fuel gas having Total Sulfur (TS) greater than 792 ppmv in any calendar day. (Basis: Regulation 2-2-208 Cumulative Increase; Regulation 2-1-403 Permit Condition, Regulation 2-5 Toxics)

2. The owner/operator of S-11, S-12, S-13, S-22, S-352, S-353, S-354, S-355, S-356, and/or S-357 shall test for Total Sulfur (TS) concentration of the fuel gas by GC analysis or an Air District approved method at least once per 8-hr shift (3 times per calendar day). The results shall be submitted to the Air District's Compliance Division in a table format each calendar month, with a separate entry for each daily average no later than 30 days of the end of each calendar month.

(Basis: Regulation 2-2-208 Cumulative Increase)

3. For the purpose of demonstrating compliance with the H<sub>2</sub>S limit in 40 CFR 60.104(a)(1), The owner/operator of S-11, S-12, S-13, S-22 and/or S-45 shall test the fuel gas prior to combustion at S-11, S-12, S-13, S-22 and/or S-45 to determine total H<sub>2</sub>S concentration at least once per 8 hour shift (3 times per calendar day). At least 90% of these samples shall be taken each calendar month. No readable samples or sample results shall be omitted. Records of H<sub>2</sub>S monitoring shall be kept for at least five years after the date the record was made. The owner/operator shall submit a semi-annual report regarding this monitoring to the Air District's Compliance and Enforcement and Engineering Divisions. The reporting periods shall start on January 1st and July 1st of each year. The reports shall be submitted by January 31st and July 31st of each year. If the limit has not been exceeded during the reporting period, this information shall be stated in the report. If the limit has been exceeded, the owner/operator shall report the date and time that the exceedance began and the date and time that the exceedance ended. The owner operator shall estimate and report the excess emissions during the exceedance. [Basis: Regulation 2-1-403 Permit Conditions, 40 CFR 60.13(i)]

4. To determine compliance with the above parts, the owner/operator of S-11, S-12, S-13, S-22, S-352, S-353, S-354, S-355, S-356, S-357, and/or S-438 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:

- a. Total Sulfur (TS) and H<sub>2</sub>S concentration
- b. Type of feedstock used during the sampling and testing;
- c. Feed/Processing Rate; and
- d. Date and time of sampling and testing
- e. Daily average TS calculations and consecutive 12-month average TS concentrations.

All records shall be retained on-site for five years, from the date of entry, and made available for inspection by Air District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable Air District Regulations.



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-11, S-12, S-13, S-22, S-45, S-101, S-352, S-353, S-354, S-355, S-356, S-357, & S-438**

**Condition No. 27659**

**Plant No. 21359**

**Application No. 31157**

(Basis: Regulation 2-2-208 Cumulative Increase)

5. Within 180 days of the startup of any one of the following sources for each group (Group 1: S-11, S-12, S-13, S-22, and/or S-45), (Group 2: S-352, S-353, S-354, S-355, S-356, and/or S-357), and/or (Group 3: S-438), the owner/operator shall conduct source testing to develop Air District approved fuel gas combustion emissions factors for each group (Groups 1, 2, and 3) in lbs of TAC/MMBtu for the following toxic air contaminant pollutants: Sulfuric Acid, AH (as B(a)P-equivalent), Ammonia, 1,4-Dichlorobenzene(p), Acetaldehyde, Arsenic, Benzene, Beryllium, Cadmium, Chromium (hexavalent), Copper, Cyanide and compounds, Ethyl benzene, Formaldehyde, Hexane, Hydrochloric acid, Hydrogen sulfide, Lead, Manganese, Mercury, Naphthalene, Nickel, Phenol, Propylene, Selenium, Toluene, Vanadium, and Xylenes. The owner/operator shall use the following test methods in the table below, or other Air District approved test methods. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing.

Pollutant	Test Method
Sulfuric Acid	EPA Method 8
PAH (as B(a)P-equivalent)	CARB 429
Ammonia	BAAQMD ST-1B
1,4-Dichlorobenzene(p)	EPA Method TO-15
Acetaldehyde	CARB 430
Arsenic	EPA Method 29
Benzene	EPA Method TO-15
Beryllium	EPA Method 29
Cadmium	EPA Method 29
Chromium (hexavalent)	CARB 425
Copper	EPA Method 29
Cyanide and compounds	CARB Method 426
Ethyl benzene	EPA Method TO-15
Formaldehyde	CARB 430
Hexane	EPA Method TO-15
Hydrochloric acid	EPA Method 26A
Hydrogen sulfide	EPA Method 11
Lead	EPA Method 29
Manganese	EPA Method 29
Mercury	EPA Method 29
Naphthalene	CARB 429
Nickel	EPA Method 29
Phenol	EPA Method TO-15
Propylene	EPA Method TO-15



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-11, S-12, S-13, S-22, S-45, S-101, S-352, S-353, S-354, S-355, S-356, S-357, & S-438**

**Condition No. 27659**

**Plant No. 21359**

**Application No. 31157**

Selenium	EPA Method 29
Toluene	EPA Method TO-15
Vanadium	EPA Method 29
Xylenes (isomers and mixture)	EPA Method TO-15

Prior to the issuance of the Permit to Operate for the sources above, fuel gas combustion emission factors from source testing shall be used to verify emission factors used in the engineering evaluation for the issuance of the Authority to Construct. If source testing results indicate an increase in any toxic air contaminants and/or identify any new toxic air contaminants not previously evaluated as part of the issuance of the Authority to Construct, the health risk assessment (HRA) shall be updated in order to verify compliance with Regulation 2, Rule 5 prior to the issuance of the Permit to Operate

(Basis: Regulation 2-2-208 Cumulative Increase; Regulation 2-5 Toxics)

6. Within 180 days of the startup of source S-45, the owner/operator shall conduct an initial source test to demonstrate compliance with Condition 22962, Part 4 requirements for NO<sub>x</sub>, CO, POC, PM<sub>10</sub>, Condition 22962, Part 5 for Ammonia and Condition 22970, Part 2 for sulfuric acid. The owner/operator shall use only Air District approved test methods. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase)

7. Within 180 days of the startup of sources S-11, S-12, S-13 and/or S-22, the owner/operator shall conduct an initial and annual source tests thereafter to demonstrate compliance with Condition 1694, Part 4 requirement for SO<sub>2</sub>. The owner/operator shall use only Air District approved test methods. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase)

8. Within 180 days of the startup of source S-438, the owner/operator shall conduct an initial and annual source tests thereafter to demonstrate compliance with Condition 1694, Part E4 requirements for NO<sub>x</sub>, CO and POC. The owner/operator shall use only Air District approved test methods. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-453 & S-455**

**Condition No. 27660**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance): Phillips 66 Rodeo Renewed Project.

S-453 U230 Cooling Tower

S-455 U240 Cooling Tower

S-614 Wet Surface Air Cooler (WSAC) at S-600 Pretreatment Unit (exempt per Regulation 2-1-128.4)

1. The owner/operator of S-453 Cooling Tower shall not exceed a total recirculation water throughput of 13,500 gallons per minute and/or 7,095.6 million gallons during any consecutive 12-month period. (Basis: Regulation 2-1-403 Permit Conditions)
2. The owner/operator of S-455 Cooling Tower shall not exceed a total recirculation water throughput of 33,000 gallons per minute and/or 17,344.8 million gallons during any consecutive 12-month period. (Basis: Regulation 2-1-403 Permit Conditions)
3. The owner/operator of S-453 and S-455 shall not exceed any of the following limits:
  - a. TOC (POC and/or NPOC combined) for S-453 = 13.62 pounds in any calendar day and/or 2.49 tons in any consecutive 12-month period
  - b. TOC (POC and/or NPOC combined) for S-455 = 33.29 pounds in any calendar day and/or 6.08 tons in any consecutive 12-month period
  - c.  $PM_{10} = PM_{2.5}$  for S-453 = 3.18 pounds in any calendar day and/or 0.58 tons in any consecutive 12-month period
  - d.  $PM_{10} = PM_{2.5}$  for S-455 = 8.11 pounds in any calendar day and/or 1.48 tons in any consecutive 12-month period(Basis: Regulation 2-1-403 Permit Conditions)
4. The owner/operator of S-453 and/or S-455 shall ensure the TOC content of cooling water shall not exceed the action trigger level of 84 ppbw. Within 30 days of the Rodeo Renewed Project startup of S-453 and/or 455, the owner/operator of each S-453 and/or S-455 shall take sample of the cooling water return line at least once every week (52 samples per consecutive 12 month period) using EPA Method 8015D or any other Air District approved method. After six consecutive months, the owner/operator of S-453 and S-455 may elect to move to a bi-monthly sampling schedule (two samples every month) provided weekly sampling results do not exceed 84 ppbw for six consecutive months (26 consecutive weekly samples). In the event that any sampling result from S-453 and /or S-455 exceeds 84 ppbw, the owner/operator shall revert to the weekly sampling schedule. (Basis: Regulation 11-10)
5. The owner/operator of S-453 and S-455 Cooling Towers shall not exceed a total dissolved solids (TDS) content in the cooling water of 1,964 ppmw and/or 2047 ppmw (averaged over any consecutive 30-day period), respectively. Compliance with the above TDS concentration limit shall be based on the daily conductivity measurements that shall be taken at the cooling water sump basis at least once per operating shift and in concert with a correlation factor of 0.67 mg/L per microhm. (Basis: Regulation 2-1-403 Permit Conditions)
6. The operator/owner of the S-453 and S-455 Cooling Towers shall maintain documentation, written and provided by the vendor/manufacture, of the guaranteed maximum cooling water drift rate of 0.001 % and the premise, basis, and justification for the drift rate. (Basis: Regulation 2-1-403 Permit Conditions)
7. The owner/operator of each S-453 and S-455 shall install an Air District approved properly operated and properly maintained per manufacturer's specifications non-resettable totalized flow meter that measures the total water flow rate (recirculation and added flow rates). (Basis: Regulation 2-1-403 Permit Conditions)
8. The owner/operator of the S-453, S-455 Cooling Towers and S-614 (WSAC), shall maintain in an Air District approved log, all water usage, recirculation rates, monitoring, source test, vendor/manufacture's specifications, and other records as required to demonstrate compliance with the above conditions on site for at least five years



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-453 & S-455**

**Condition No. 27660**

**Plant No. 21359**

**Application No. 31157**

from the date of data entry, and shall be made available to the Air District's staff for inspection upon request.  
(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-5)

9. The owner/operator of S-614 Wet Surface Air Cooler (at S-600 Pretreatment Unit) shall conduct a quarterly Air District-approved sampling and testing required of total hydrocarbon concentration of cooling water at recirculation line to ensure no leakage of process water  
(Basis: Regulation 2-1-128.4, Cumulative increase)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-150**

**Condition No. 27661**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance - Phillips 66 Rodeo Renewed Project) - Established throughputs for S-150 Renewable Naphtha Tank (Tank 241).

1. The owner/operator of S-150 shall ensure that the renewable naphtha does not exceed 519,471 barrels in any consecutive rolling 12-month period and/or 31,655 barrels in any calendar day.  
(Basis: Regulation 2-2-208 Cumulative Increase)
2. The owner/operator of S-150 may store alternate organic liquid(s) other than the materials specified in Part 1 and/or usages in excess of those specified in Part 1 provided that the owner/operator can demonstrate that all of the following are satisfied:
  - a. Total POC emissions from S-150 do not exceed 1.813 tons in any consecutive rolling twelve month period and/or 15 pounds in any calendar day;
  - b. Total NPOC emissions from S-150 shall be zero;
  - c. The use of these materials does not increase toxic emissions to equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.(Basis: Regulation 2-2-208 Cumulative Increase; Regulation 2-5 Toxics)
3. To determine compliance with the above parts, the owner/operator of S-150 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:
  - a. Quantities, true vapor pressure and emissions calculations of each type of liquid stored at this source on a daily basis.
  - b. If a material other than those specified in Part 1 is stored, POC and/or NPOC, and toxic component contents of each material used; and Air District approved mass emissions calculations to demonstrate compliance with Part 2, on a daily basis;
  - c. Daily throughput and/or Air District approved emissions calculations shall be totaled for each consecutive twelve-month period.

All records shall be retained on-site for at least five years, from the date of entry, and made available for inspection by Air District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable Air District Regulations. (Basis: Cumulative Increase; Toxics)

***End of Conditions***





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-352, S-353, S-354, S-355, S-356, & S-357**

**Condition No. 27754**

**Plant No. 21359**

**Application No. 31157**

CONDITIONS FOR S352, S353, S354, S355, S356, S357: TURBINES AND DUCT BURNERS  
AMENDED BY RODEO RENEWED PROJECT, APPLICATION 31157 (2022)

1. The gas turbines (S352, S353 and S354) and the heat recovery steam generator (HRSG) duct burners (S355, S356 and S357) shall be fired on fuel gas or natural gas.  
[Cumulative Increase]
2. A HRSG duct burner shall be operated only when the associated gas turbine is operated.  
[Cumulative Increase]
3. The exhaust from S352 and S355 shall be abated at all times by SCR unit A13, except that S352 and S355 may operate without SCR abatement on a temporary basis for periods of planned or emergency maintenance. A District-approved NOx CEM shall monitor and record the S352 and S355 NOx emission rate whenever S352 and S355 operate without abatement. All emission limits applicable to S352 and S355 shall remain in effect whether or not they are operated with SCR abatement. [BACT, Cumulative Increase]
4. The exhaust from S353 and S356 shall be abated at all times by SCR unit A14, except that S353 and S356 may operate without SCR abatement on a temporary basis for periods of planned or emergency maintenance. A District-approved NOx CEM shall monitor and record the S353 and S356 NOx emission rate whenever S353 and S356 operate without abatement. All emission limits applicable to S353 and S356 shall remain in effect whether or not they are operated with SCR abatement. [BACT, Cumulative Increase]
5. The exhaust from S354 and S357 shall be abated at all times by SCR unit A15, except that S354 and S357 may operate without SCR abatement on a temporary basis for periods of planned or emergency maintenance. A District-approved NOx CEM shall monitor and record the S354 and S357 NOx emission rate whenever S354 and S357 operate without abatement. All emission limits applicable to S354 and S357 shall remain in effect whether or not they are operated with SCR abatement. [BACT, Cumulative Increase]
6. Total fuel fired in S355, S356, and S357 shall not exceed 2.42 E 12 btu in any consecutive 365 day period. [Cumulative Increase]
7. CO emissions from each turbine/duct burner set shall not exceed 39 ppmv at 15% oxygen, averaged over any consecutive 30 day period. Emissions during startup periods, which shall not exceed four hours, and shutdown periods, which shall not exceed two hours, may be excluded when averaging emissions. [BACT, Cumulative Increase]
8. POC emissions from each turbine/duct burner set shall not exceed 6 ppmv at 15% oxygen, averaged over any consecutive 30 day period. Emissions during startup periods, which shall not exceed four hours, and shutdown periods, which shall not exceed two hours, may be excluded when averaging emissions. [BACT, Cumulative Increase]
- 9a. The combined NOx emissions from S352, S353, S354, S355, S356 and S357 shall not exceed 66 lb/hr (averaged over any 3 hour period), nor 167 tons in any consecutive 365 day period. NOx emissions from each turbine/duct burner set shall not exceed 528 lb/day. (This condition will be invalid when the NOx emissions at these sources must be reduced to provide offsets for Application 13424.) [BACT, Cumulative Increase]
- 9b. This part will apply after NOx emissions at S352, S353, S354, S355, S356 and S357 must be reduced to provide offsets for Application 13424 per Condition 22970, Part B. The combined NOx emissions from S352, S353, S354, S355, S356 and S357 shall not exceed 66 lb/hr (averaged over any 3 hour period), and shall not exceed 79.8 tons in any consecutive 365 day period. NOx emissions from each turbine/duct burner set shall not exceed 528 lb/day. [BACT, Cumulative Increase, Offsets]
- 9c. NOx emissions from S352, S353, S354, S355, S356 and S357 shall be monitored with a District-approved continuous emission monitor. [BACT, Cumulative Increase]



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-352, S-353, S-354, S-355, S-356, & S-357**

**Condition No. 27754**

**Plant No. 21359**

**Application No. 31157**

- 9d. The owner/operator shall use a fuel meter to determine the heat input to each unit. This data shall be used to determine compliance with all throughput limits and the NO<sub>x</sub>, CO, and SO<sub>2</sub> mass emission limits. [Cumulative Increase, 2-6-503]
- 10a. The combined CO emissions from S352, S353, S354, S355, S356 and S357 shall not exceed 200 tons in any consecutive 365 day period. [BACT, Cumulative Increase]
- 10b. CO emissions from S352, S353, S354, S355, S356 and S357 shall be monitored with a District-approved continuous emission monitor. [BACT, Cumulative Increase]
11. The combined POC emissions S352, S353, S354, S355, S356 and S357 shall not exceed 8.3 lb/hr and shall not exceed 30.5 tons in any consecutive 365 day period. [BACT, Cumulative Increase]
12. The fuel gas shall be tested for total reduced sulfur (TRS) concentration at least once per 8 hour shift (3 times per calendar day). At least 90% of these samples shall be taken each calendar month. No readable samples or sample results shall be omitted. TRS shall include hydrogen sulfide, methyl mercaptan, methyl sulfide, dimethyl disulfide. [Cumulative Increase]
13. The average of the 3 daily fuel gas TRS sample results shall be reported to the Air District in a table format each calendar month, with a separate entry for each daily average. Sample reports shall be submitted to the Air District within 30 days of the end of each calendar month. Any omitted sample results shall be explained in this report. [Cumulative Increase]
14. A source test to verify compliance with Parts 8 and 11 shall be performed each calendar year in accordance with Air District source test methods or other methods approved in advance by the Air District. A copy of the test report shall be provided to the District Director of Compliance and Enforcement within 60 days of completion of the test. [Regulation 2-6-409.2]
15. Records shall be maintained to allow verification of compliance with all permit conditions. Records shall be retained for at least five years and shall be made available to the Air District upon request. [BACT, Cumulative Increase]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-125**

**Condition No. 27787**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance - Phillips 66 Rodeo Renewed Project) - Established throughputs for S-125 Gasoline, Gasoline Blend, and Renewable Naphtha Tank (Tank 170).

1. The owner/operator of S-125 shall ensure that the renewable naphtha does not exceed 3,000,000 barrels in any consecutive rolling 12-month period and/or 29,918 barrels in any calendar day.  
(Basis: Regulation 2-2-208 Cumulative Increase)
2. The owner/operator of S-125 may store alternate organic liquid(s) other than the materials specified in Part 1 and/or usages in excess of those specified in Part 1 provided that the owner/operator can demonstrate that all of the following are satisfied:
  - a. Total POC emissions from S-125 do not exceed 1.782 tons in any consecutive rolling twelve month period and/or 10 pounds in any calendar day;
  - b. Total NPOC emissions from S-125 shall be zero;
  - c. The use of these materials does not increase toxic emissions to equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.  
(Basis: Regulation 2-2-208 Cumulative Increase; Regulation 2-5 Toxics)
3. To determine compliance with the above parts, the owner/operator of S-125 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:
  - a. Quantities, true vapor pressure and emissions calculations of each type of liquid stored at this source on a daily basis.
  - b. If a material other than those specified in Part 1 is stored, POC and/or NPOC, and toxic component contents of each material used; and Air District approved mass emissions calculations to demonstrate compliance with Part 2, on a daily basis;
  - c. Daily throughput and/or Air District approved emissions calculations shall be totaled for each consecutive twelve-month period.

All records shall be retained on-site for at least five years, from the date of entry, and made available for inspection by Air District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable Air District Regulations. (Basis: Cumulative Increase; Toxics)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-446 & S-447**

**Condition No. 27808**

**Plant No. 21359**

**Application No. 31157**

**CONDITIONS FOR S445, TANK (T-271)**

S-445 will be exempt after Rodeo Renewed Project startup, Application 31157 (2022). New condition 27646, Part 21 requires notification of switch to exempt service. New condition 27646, Part 22 also requires notification of switching to exempt service only.

1. Working emissions from S445 shall be collected and vented to the refinery fuel gas supply. Other abatement devices, which provide at least 98% abatement of POC and/or NPOC combined emissions by weight, may be used with the prior approval of the Air District. [Basis: Cumulative Increase, Regulation 1-107]

**CONDITIONS FOR S446, TANK (T-310)**

Amended by Application 31157 (2022)

1. The owner/operator shall ensure the emissions from S446 be collected and vented to the refinery Vapor Recovery System A-7 or other Air District approved abatement devices, which provide at least 98% abatement of POC and/or NPOC combined emissions by weight. [Basis: Cumulative Increase, Regulation 1-107]

**CONDITIONS FOR S447, TANK (T-311)**

Amended by Application 31157 (2022)

1. The owner/operator shall ensure the emissions from S447 be collected and vented to the refinery Vapor Recovery System A-7 or other Air District approved abatement devices, which provide at least 98% abatement of POC and/or NPOC combined emissions by weight. [Basis: Cumulative Increase, Regulation 1-107]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-448**

**Condition No. 27809**

**Plant No. 21359**

**Application No. 31157**

AMENDED BY APPLICATIONS 22023 (SEPT. 2010) AND 23726 (OCT 2011)

CONDITIONS FOR S-448 (T-1007), S-448 will be exempt after Rodeo Renewed Project startup, Application 31157 (2022).

1. Delete, tank exempt.
2. S448 shall operate with closed, gasketed covers on all tank openings except pressure relief valves and vacuum breaker valves. [BACT]

3. Deleted, Tank exempt.

Alternate Operating Scenario

4. S-448 is under an Alternate Operating Scenario in accordance with BAAQMD Regulation 2-6-409.7 and 40 CFR 70 and either stores material subject to Regulation 8, Rule 5 and 40 CFR Part 60 Subpart Kb or stores material exempt from Regulation 8, Rule 5 and 40 CFR Part 60 Subpart Kb.
  - a. The owner/operator shall keep a record in a contemporaneous log of the stored material.
  - b. The owner/operator shall notify the District in accordance with section 40 CFR 60.113(a)(5) prior to storing materials in S-448 that are subject to Regulation 8, Rule 5 and 40 CFR Part 60 Subpart Kb.
  - c. The owner/operator shall perform inspections required by Regulation 8, Rule 5 and 40 CFR Part 60 Subpart Kb prior to storing materials in S-448 that are subject to those regulations.

[40 CFR 70.6(a)(9), BAAQMD Regulation 2-6-409.7]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-11 & S-22**

**Condition No. 27811**

**Plant No. 21359**

**Application No. 31157**

This condition was amended by Applications 13424 in October 2007, 14602 in May 2008, 22904 in March 2013, 21848 in September 2014, and 31157 in 2022

Regulation 9-10 Refinery-Wide Compliance

CONDITIONS FOR SOURCES S2, S3, S4, S5, S7, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18, S19, S20, S22, S31, S43, S44, S336, S337, S371, S372.

1. The following sources are subject to the refinery-wide NO<sub>x</sub> emission rate and CO concentration limits in Regulation 9-10: [Regulation 9-10-301 and 305]

S# Description NO<sub>x</sub> CEM

2 U229, B-301 Heater No

3 U230, B-201 Heater Yes

4 U231, B-101 Heater Yes

5 U231, B-102 Heater Yes

7 U231, B-103 Heater Yes

9 U240, B-2 Boiler Yes

10 U240, B-101 Heater Yes

11 U240, B-201 Heater Yes

12 U240, B-202 Heater Yes

13 U240, B-301 Heater Yes

15 U244, B-501 Heater Yes

16 U244, B-502 Heater Yes

17 U244, B-503 Heater Yes

18 U244, B-504 Heater Yes

19 U244, B-505 Heater Yes

20 U244, B-506 Heater No

22 U248, B-606 Heater No

shutdown per AN31157 upon startup

shutdown per AN 31157 upon startup

31 U200, B-501 Heater No

43 U200, B-202 Heater Yes

44 U200, B-201 PCT Reboil Furnace Yes

336 U231 B-104 Heater Yes

337 U231 B-105 Heater Yes

shutdown per AN31157 upon startup

371 U228 B-520 (Adsorber Feed) Furnace Yes

372 U228 B-521 (Hydrogen Plant) Furnace Yes

2. The owner/operator of each source listed in Part 1 shall properly install, properly maintain, and properly operate an O<sub>2</sub> monitor and recorder. [Regulation 9-10-502]

3. The owner/operator shall operate each source listed in Part 1, that does not have a NO<sub>x</sub> CEM within specified ranges of operating conditions (firing rate and oxygen content) as detailed in Part 5. The ranges shall be established by utilizing data from district approved source tests.

a. The NO<sub>x</sub> Box for units with a maximum firing rate of 25 MMBtu/hr or more shall be established using the procedures in Part 4.

b. The NO<sub>x</sub> Box for units with a maximum firing rate less than 25 MMBtu/hr shall be established as follows: High fire shall be the maximum rated capacity. Low fire shall be 20% of the maximum rated capacity.

There shall be no maximum or minimum O<sub>2</sub>.

[Regulation 9-10-502]





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-11 & S-22**

**Condition No. 27811**

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4. The owner/operator shall establish the initial NOx box for each source subject to Part 3. The NOx Box may consist of two operating ranges in order to allow for operating flexibility and to encourage emission minimization during standard operation. The procedure for establishing the NOx box is as follows:

- a. Conduct district approved source tests for NOx and CO, while varying the oxygen concentration and firing rate over the desired operating ranges for the furnace;
- b. Determine the minimum and maximum oxygen concentrations and firing rates for the desired operating ranges (Note that the minimum O<sub>2</sub> at low fire may be different than the minimum O<sub>2</sub> at high fire. The same is true for the maximum O<sub>2</sub>). The owner/operator shall also verify the accuracy of the O<sub>2</sub> monitor on an annual basis
- c. Determine the highest NOx emission factor (lb/Mmbtu) over the preferred operating ranges while maintaining CO concentration below 200 ppm; the owner/operator may choose to use a higher NOx emission factor than tested.
- d. Plot the points representing the desired operating ranges on a graph. The resulting polygon(s) is the NOx Box, which represents the allowable operating range(s) for the furnace under which the NOx emission factor from part 5a is deemed to be valid.
  - 1) The NOx Box can represent/utilize either one or two emission factors.
  - 2) The NOx Box for each emission factor can be represented either as a 4 or 5-sided polygon. The NOx box is the area within the 4 or 5-sided polygon formed by connecting the source test based parameters that lie about the perimeter of successful approved source tests. The source test parameters forming the corners of the NOx box are listed in Part 5.
- e. Upon establishment of each NOx Box, the owner/operator shall prepare a graphical representation of the box. The representation shall be made available on site for APCO review upon request. The box shall also be submitted to the BAAQMD with permit amendments.

5. Except as provided in Part 5b and 5c, the owner/operator shall operate each source within the NOx box ranges listed below at all times of operation. This part shall not apply to any source which has a properly operated and properly installed NOx CEM.

a. NOx Box ranges

2/0.031/N/A, 4.4/N/A, 4.4/N/A, 22/N/A/N/A, 22

. Deleted S-11 now has NOx CEM.

. Deleted S-12 now has NOx CEM.

20/0.036/N/A, 4.6/N/A, 4.6/N/A, 23/N/A/N/A, 23

22/0.036/2.1, 6.2/2.1, 24/4.4, 24/4.7, 21/4.7, 6.2

22/0.050/4.7, 6.2/4.7, 21/10, 20.3/10, 6.2/N/A.

31/0.055/N/A, 4/N/A, 4/N/A, 20/N/A/N/A, 20

The limits listed above are based on a calendar day averaging period for both firing rate and O<sub>2</sub>%.

b. Part 5a does not apply during:

- 1) startup or shutdown periods,
- 2) periods of curtailed operation (i.e., firing rate less than or equal to 30% of unit's rated capacity as defined in 9-10-22), or
- 3) to units temporary out of service. During these conditions the means for determining compliance with the refinery wide limit shall be accomplished using the method described in 9-10-301.4 and 301.5.



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**Source Nos. S-11 & S-22**

**Condition No. 27811**

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- c. Part 5a does not apply during any source test required or permitted by this condition. (Reg. 9-10-502). See Part 7 for the consequences of source test results that exceed the emission factors in Part 5.
- 6.
- a. The owner/operator may deviate from the NO<sub>x</sub> Box (either the firing rate or oxygen limit) provided that the owner/operator conducts a district approved source test which replicates the past operation outside of the established ranges. The source test representing the new conditions shall be conducted no later than the next regularly scheduled source test period, or within eight months, whichever is sooner. The source test results will establish whether the source was operating outside of the emission factor utilized for the source. The source test results shall be submitted to the district source test manager within 60 days of the test. As necessary, a permit amendment shall be submitted.
- 1) Source Test  $\leq$  Emission Factor
- If the results of this source test do not exceed the higher NO<sub>x</sub> emission factor in Part 5, or the CO limit in Part 9, the unit will not be considered to be in violation during this period for operating out of the "box." The facility may submit an accelerated permit program permit application to request an administrative change of the permit condition to adjust the NO<sub>x</sub> Box operating range(s), based on the new test data. The change will be considered to be an administrative change for the purpose of the District permit and a minor revision for the purpose of the Major Facility Review permit.
- 2) Source Test  $>$  Emission Factor
- If the results of this source test exceed the permitted emission concentrations or emission rates then, utilizing measured emission concentration or rate, the owner/operator shall apply the higher emission factor retroactively to the date of the previous source test and provide sufficient NO<sub>x</sub> IERCs for that time period to ensure the facility is in compliance with the refinery wide limit specified in Regulation 9-10-301. The owner/operator will be in violation of Regulation 9-10-301 for each day there are insufficient NO<sub>x</sub> IERCs provided to bring the refinery wide average into compliance with Regulation 9-10-301. The facility may submit a permit application to request an alteration of the permit condition to change the NO<sub>x</sub> emission factor and/or adjust the operating range, based on the new test data.
- b. The owner/operator must report conditions outside of box within 96 hours of occurrence.
7. For each source subject to Part 3, the owner/operator shall conduct source tests at the schedule listed below. The source tests are performed in order to measure NO<sub>x</sub>, CO, and O<sub>2</sub> at the as-found firing rate, or at conditions reasonably specified by the APCO. The source test results shall be submitted to the District Source Test Manager within 60 days of the test. [Regulation 9-10-502]
- a. Source Testing Schedule
- 1) Heater  $<$  25 MMBtu/hr: One source test per consecutive 12-month period. The time interval between source tests shall not exceed 16 months.
- 2) Heaters = 25 MMBtu/hr: Two source tests per consecutive 12-month period. The time interval between source tests shall not exceed 8 months and not be less than 5 months apart. The source test results shall be submitted to the district source test manager within 60 days of the test. [Regulation 9-10-502]
- b. If the results of any source test under this part exceed the permitted concentrations or emission rates, the owner/operator shall follow the requirements of Part 6a(ii). If the owner/operator chooses not to submit an application to revise the emission factor, the owner/operator shall conduct another Part 7 source test, at the same conditions, within 90 days of the initial test.
8. For each source listed in Part 1 with a NO<sub>x</sub> CEM installed, the owner/operator shall conduct semiannual district approved CO source tests at as-found conditions. The time interval between source tests shall not exceed 8 months. District conducted CO emission tests associated with District conducted NO<sub>x</sub> CEM field accuracy tests may be substituted for the CO semiannual source tests.
9. For any source listed in Part 1 for which any two source test results over any consecutive five-year period are greater than or equal to 200 ppmv CO at 3% O<sub>2</sub>, the owner/operator shall properly install, properly maintain, and



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**Source Nos. S-11 & S-22**

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properly operate a CEM to continuously measure CO and O<sub>2</sub>. The owner/operator shall install the CEM within the time period allowed in the District's Manual of Procedures. [Regulation 9-10-502, 1-522]

10. In addition to records required by 9-10-502, the facility must maintain records of all source tests conducted to demonstrate compliance with Parts 1 and 5. These records shall be kept on site for at least five years from the date of entry in a District approved log and be made available to District staff upon request. [Recordkeeping, Regulation 9-10-504]

11. \*The sources listed in Part 1 of this condition make up the group of sources that are operating under an Alternative Compliance Plan (ACP). The owner/operator shall demonstrate compliance with their ACP and with Regulation 9-10-301 by keeping a spreadsheet of the ACP calculations in a District approved format. [basis: Regulation 2-9-303, 9-10-301]

Conditions for use of IERCs for compliance with Regulation 9-10-301:

12. \*The owner/operator shall submit quarterly reports to the APCO, within 30 days following the end of each calendar quarter, or other 3-month interval established in the plan. Each quarterly report shall include:

- a. Summary of the amount of IERC's used during the previous quarter;
- b. Sum of all IERC's used during the current ACP period;
- c. A projection of the IERC's that are needed for the entire ACP period based on the IERC usage rates calculated in Parts 12a and 12b of this condition, including the Environmental Benefit Surcharge, per Regulation 2-9-309, and
- d. Certification that the facility possesses IERC's equal to the amount projected in Part 12c of this condition or a description of how the facility will adjust its operation so that the amount of IERC's does not exceed the amount of IERC's possessed by the facility.

[basis: Regulation 2-9-502.3]

13. \*The owner/operator shall submit an annual reconciliation report to the APCO within 30 days of following the end of the ACP period, and surrender the banking certificate(s) for all IERC's used during the ACP period, including the environmental benefit surcharge, per Regulation 2-9-309. [basis: Regulation 2-9-502.4]

14. \*The ACP must be reviewed and approved by the APCO on an annual basis. The owner/operator shall submit all necessary documents mentioned in Regulation 2-9-303 with ACP renewal request. [basis: Regulation 2-9-303]

15. \*The owner/operator shall retain records for five years from the date the record was made, and shall submit such information as required by the APCO to determine compliance with the ACP. [basis: Regulation 2-9-502.2]

### ***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-453 & S-455**

**Condition No. 27812**

**Plant No. 21359**

**Application No. 31157**

For Sources S452, S453, S455, S457, S458, S500, Cooling Towers (Applications 10349, 14112, 17465, 27798), Amended by Application 31157 - Condition 27646, part 1 is for S452, S457, and S458. New Condition 27660 was created for S-453 and S-455.

1. Deleted.
2. Deleted.
3. Deleted.
4. The owner/operator shall sample the cooling tower water at each cooling tower at least once per month and subject the sample to a District approved laboratory analysis to determine its total dissolved solids content. [Regulations 2-6-503, Regulation 3]
5. Deleted.
6. Deleted.
7. The owner/operator shall use the total dissolved solids monitoring to estimate annual emissions of particulate from the cooling towers. The estimated annual emissions shall be reported to the Engineering Divisions by June 30<sup>th</sup> of each year as part of the annual update. The owner/operator shall use this estimate to confirm that S452 or S500 has each not emitted more than 5 tons particulate per year. [Regulations 2-1-319.1, 3]
8. The owner/operator shall maintain the following records for five years from the date of record:
  - a. Deleted.
  - b. Deleted.
  - c. Deleted
  - d. Records of monthly determination of total dissolved solids
  - e. Deleted.
  - f. Deleted.[Regulation 2-6-501]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-334**

**Condition No. 27813**

**Plant No. 21359**

**Application No. 31157**

For Sources S123 (Tank 168), S124 (Tank 169), S186 (Tank 298), and S334 (Tank 107)  
Amended by Rodeo Renewed Project, Application 31157 (2022) upon startup

1. The owner/operator shall ensure that S123 contains only water and organic liquid with a true vapor pressure less than or equal to 3.0 psia. [Cumulative Increase]
2. The owner/operator shall ensure that S124 contains only water and organic liquid with a true vapor pressure less than or equal to 11.0 psia. [Cumulative Increase]
3. The owner/operator shall ensure that the emissions of S186 do not exceed 2,231 lb VOC in any consecutive 12-month period. S186 shall only contain organic liquids. [Cumulative Increase]
4. Deleted. S-334 will be exempt per Rodeo Renewed Project, Application 31157
5. The owner/operator shall ensure that the throughput of organic liquids at S123 does not exceed 3,000,000 barrels/yr. [Cumulative Increase]
6. The owner/operator shall ensure that the throughput of organic liquids at S124 does not exceed 3,000,000 barrels/yr. [Cumulative Increase]
7. Deleted. S-334 will be exempt per Rodeo Renewed Project, Application 31157
- 8a. The owner/operator shall equip S123, S124, and S186 with a BAAQMD approved roof with mechanical shoe primary seal and zero gap secondary seal meeting the design criteria of BAAQMD Regulation 8, Rule 5. The owner/operator shall ensure that there are no ungasketed roof penetrations, no slotted pipe guide poles unless equipped with float and wiper seals, and no adjustable roof legs unless fitted with vapor seal boots or equivalent. [BACT, cumulative increase]
- 8b. The owner/operator shall operate S334 with closed, gasketed covers on all tank openings except pressure relief valves and vacuum breaker valves. The owner/operator shall equip S334 with a BAAQMD approved roof with liquid mounted primary seal that meets the design criteria of BAAQMD Regulation 8-5-321.3 and secondary seal that meets the design criteria of BAAQMD Regulation 8-5-322.5. The owner/operator shall ensure that there are no ungasketed roof penetrations, no slotted pipe guide poles unless equipped with float and wiper seals, and no adjustable roof legs unless fitted with vapor seal boots or equivalent. [BACT, cumulative increase]
9. The owner/operator shall calculate the emissions of S186 on a calendar month basis using the AP-42 equations. The owner/operator shall use actual throughputs, actual vapor pressures, and actual temperature data for each month. The owner/operator shall calculate the emissions for the last 12-month period on a monthly basis. The calculations shall be complete within a calendar month after the end of each monthly period. [Cumulative increase]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-135 & S-137**

**Condition No. 27814**

**Plant No. 21359**

**Application No. 31157**

For Sources S135 (Tank 200), S137 (Tank 202), Fixed Roof Tanks. S-135 and S-137 will be exempt after the Rodeo Renewed Project start up and will be phased in, Application 31157 (2022)

1. The owner/operator shall ensure that S135 and S137 are controlled at all times by A7, Vapor Recovery System, with at least 98% abatement of POC and/or NPOC emissions by weight. [Basis: Cumulative Increase, Regulation 1-107]

***End of Conditions***





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-45**

**Condition No. 27815**

**Plant No. 21359**

**Application No. 31157**

This condition was amended by Application 13424 in October, 2007, Application 25621 in April, 2014, Application 27798 in 2018, Application 31157 in 2022.

Source 45, U246 B-801 A/B Heater

1. The owner/operator of the S45 heater shall fire only fuel gas and/or natural gas at this unit. [BACT, Cumulative Increase]
2. Based on fuel gas HHV, the owner/operator of S45 shall not exceed the following firing rates:
  - a. 85 MMBtu/hr
  - b. 744,600 MMBtu in any consecutive 12-month period.[Cumulative Increase]
3. The owner/operator of S45 shall abate emissions from S45 at the A47 SCR system whenever S45 is operated, except that S45 may operate without SCR abatement on a temporary basis for periods of standby and planned or emergency maintenance. A District-approved NOx CEM shall monitor and record the S45 NOx emission rate whenever S45 operates without abatement. All emission limits applicable to S45 shall remain in effect even if it is operated without SCR abatement. [BACT, Cumulative Increase]
4. The owner/operator of S45 shall not exceed the following emission concentrations or rates from S45/A47 except during startups, shutdowns, and standby mode (SCR temperature below 475 deg. F along with no fresh process feed). Startups and shutdowns shall not exceed 48 consecutive hours. The 48 consecutive-hour startup period is in addition to heater dryout/warmup periods, which shall not exceed 24 consecutive hours.
  - a. NOx: 5 ppmv @ 3% oxygen (3 hr average) [BACT, Cumulative Increase]
  - b. CO: 28 ppmv @ 3% oxygen (3 hr average) when operating under 30 MMBtu/hr [BACT, Cumulative Increase, 40 CFR 63.52(a)]
  - c. POC: 5.5 lb/MM ft<sup>3</sup> [Cumulative Increase]
  - d. PM10: 7.6 lb/MM ft<sup>3</sup> [BACT, Cumulative Increase]
  - e. CO: 10 ppmv @ 3% oxygen (3 hr average) when operating over 30 MMBtu/hr [BACT, Cumulative Increase, 40 CFR 63.52(a)]If the heater operates at rates below and above 30 MMBtu/hr in any 3-hour period, the CO limit shall be a weighted average.
5. \*The owner/operator of S45 shall not exceed the following emission rate from S45/A47 except during startups and shutdowns and standby mode (SCR temperature below 475 deg. F along with no fresh process feed). Startups and shutdowns shall not exceed 48 consecutive hours. The 48 consecutive-hour startup period is in addition to heater dryout/warmup periods, which shall not exceed 24 consecutive hours.  
Ammonia: 15 ppmv @ 3% oxygen (8 hr average)  
[Regulation 2, Rule 5]
6. The owner/operator of S45 shall not exceed the following annual emission rates from S45/A47 including startups, shutdowns, standby mode, and malfunctions.
  - a. NOx: 2.3 tons/yr [BACT, Cumulative Increase]
  - b. CO: 2.8 tons/yr [BACT, Cumulative Increase]
  - c. POC: 1.5 tons/yr [Cumulative Increase]
  - d. PM10: 1.9 tons/yr [BACT, Cumulative Increase]
  - e. SO<sub>2</sub>: 4.7 tons/yr [BACT, Cumulative Increase]

The owner/operator shall calculate emissions from S45 using NOx CEM data and District approved emission factors.



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**Source No. S-45**

**Condition No. 27815**

**Plant No. 21359**

**Application No. 31157**

Year is defined as every consecutive 12-month period.

Month is defined as calendar month.

The owner/operator shall submit the basis for the CO emission factor(s) for each operating mode (startup, shutdown, standby dryout/warmup periods) to the Director of the District's Engineering Division no later than 60 days after the measurements were taken as required by Part 9a of this condition.

7. The owner/operator shall equip S45 with a District-approved continuous fuel flow monitor and recorder in order to determine fuel consumption. A parametric monitor as defined in Regulation 1-238 is not acceptable. The owner/operator shall keep continuous fuel flow records for at least five years and shall make these records available to the District upon request. [Cumulative Increase]
8. The owner/operator shall install, calibrate, maintain, and operate District-approved continuous emission monitors and recorders for NO<sub>x</sub> and O<sub>2</sub>. The owner/operator shall keep NO<sub>x</sub> and O<sub>2</sub> data for at least five years and shall make these records available to the District upon request. [BACT, Cumulative Increase]
9.
  - a. The owner/operator shall conduct District-approved source tests two times per year to determine compliance with the CO limit. The tests shall be no less than 4 months apart and no more than 8 months apart. The source tests shall be performed on the heater in an as-found condition. CO source tests performed by the District may be substituted for semi-annual CO source tests. If the heater exceeds the limits in parts 4b or 4e more than once in any 3 year period, the owner/operator shall install, calibrate, maintain, and operate a District-approved continuous emission monitor and recorder for CO within the time period specified in the District Manual of Procedures after the second exceedance of the limits in parts 4b or 4e. The owner/operator shall keep CO data for at least five years and shall make these records available to the District upon request.  
For tests conducted by the owner/operator, the owner/operator shall conduct the source tests in accordance with Part 17. The owner/operator shall submit the source test results to the Director of Compliance and Enforcement, the Source Test Manager, and the Manager of Permit Evaluation at the District no later than 60 days after the source test. [BACT, Cumulative Increase]
  - b. The owner/operator shall measure CO concentrations using a District approved handheld monitor during the first standby mode, startup, and shutdown events after this condition is incorporated into the Title V permit. Thereafter, the owner/operator shall measure CO concentrations using a District approved handheld monitor once every three years to determine CO emission factors during startup, shutdown, and standby mode. The measured CO concentrations and fuel flow data will be used to develop an emission factor or emission factors for CO emissions during startup, shutdown, and standby mode. The owner/operator may record CO concentrations over a period of time and average the concentrations to establish a more representative emission factor for each operational mode. Hand-held portable monitors shall be operated, maintained and calibrated in accordance with manufacturer guidelines.
10. The owner/operator shall use only fuel gas and/or natural gas at S45 that does not exceed 100 ppmv total sulfur, averaged over a calendar month. [BACT, Cumulative Increase]
11. The owner/operator shall test fuel gas prior to combustion at S45 to determine total sulfur concentration by GC analysis or with a total sulfur analyzer (Houston Atlas or equivalent) at least once per 8-hour shift (3 times per calendar day). At least 90% of these samples shall be taken each calendar month. No readable samples or sample results shall be omitted. [BACT, Cumulative Increase]



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**Source No. S-45**

**Condition No. 27815**

**Plant No. 21359**

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12. To demonstrate compliance with Part 10, the owner/operator shall measure and record the daily average sulfur content. The owner/operator shall keep records of sulfur content in fuel gas for at least five years and shall make these records available to the District upon request. [BACT, Cumulative Increase]
13. Deleted Application 13427.
14. The owner/operator shall record the duration of all startups, shutdowns, standby mode, and heater dryout/warmup periods to determine compliance with parts 4, 5, and 6. The owner/operator shall keep the records for at least five years and shall make these records available to the District upon request. [2-6-503]
15. Prior to the commencement of construction, the owner/operator shall submit plans to the District's Source Test Manager to obtain approval of the design and location of the source test ports. The sample ports shall be installed in accordance with Manual of Procedures, Volume 4, Section 1.2.4. (basis: Regulation 1-501)
16. No later than 90 days from the startup of any source covered under Rodeo Renewed Project under Application 31157, the owner/operator of S-42 shall conduct District-approved source tests to determine initial compliance with the limits in Part 4 for NO<sub>x</sub>, CO, POC, PM<sub>10</sub> and ammonia, and the emission rate of sulfuric acid mist. For PM<sub>10</sub>, USEPA Methods 201 and 202. The owner/operator shall conduct the source tests in accordance with Part 17. The owner/operator shall submit the source test results to the District staff no later than 60 days after the source test. [BACT, Cumulative Increase, Regulation 2, Rule 5]
17. The owner/operator shall comply with all applicable requirements for source tests specified in Volume IV of the District's Manual of Procedures and all applicable testing requirements for continuous emissions monitors as specified in Volume V of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test Manager, in writing, of the source test protocols and projected test dates at least 7 days prior to testing. [BACT, Cumulative Increase, Regulation 2, Rule 5]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-122, S-139, & S-140**

**Condition No. 27816**

**Plant No. 21359**

**Application No. 31157**

For Sources S98 (Tank 101), S122 (Tank 167), S128 (Tank 174), S139 (Tank 204); S140 (Tank 205)

This condition was amended by Application 18743 in February 2009, Application 27798 in January 2018 and 31157 (2022).

1. The owner/operator shall ensure that the following tanks contain only organic liquids with true vapor pressures less than or equal the vapor pressures below.
  - a. S98 11.00 psia October through March
  - b. S98 8.50 psia April through September
  - c. Deleted.
  - d. S122 11 psia
  - e. S128 4.4 psia [Cumulative Increase]
2. The owner/operator shall ensure that the combined throughput of gasoline, slop oil, naphtha, renewable gasoline, renewable slop oil, and/or renewable naphtha at the following tanks do not exceed the following throughput limits.
  - a. S98 3,723,000 barrels October through March
  - b. S98 3,723,000 barrels April through September
  - c. Deleted.
  - d. S122 2,000,000 barrels per consecutive 12-month period
  - e. S128 5,100,000 per any consecutive 12-month period
  - f. S139 962,972 bbls in any consecutive 12-month period
  - g. S140 630,575 bbls in any consecutive 12-month period  
[Cumulative Increase]
3. The owner/operator shall ensure that S139 and S140 are abated by A7, Vapor Recovery System. The Vapor Recovery System A7 shall have at least an overall 98% system control efficiency. [8-5-301, 40 CFR 61, Subpart FF, Regulation 1-107]
4. The owner/operator shall equip S98, S122, and S128 with a BAAQMD approved roof with mechanical shoe primary seal and zero gap secondary seal meeting the design criteria of BAAQMD Regulation 8, Rule The owner/operator shall ensure that there are no ungasketed roof penetrations, no slotted pipe guide poles unless equipped with float and wiper seals, and no adjustable roof legs unless fitted with vapor seal boots or equivalent. [BACT, cumulative increase]
5. The owner/operator of
  - a. S122 shall not exceed 5,479 barrels of organic liquids in any calendar day;
  - b. S139 shall not exceed 35,145 barrels of organic liquids in any calendar day
  - c. S140 shall not exceed 56,107 barrels of organic liquids in any calendar day.  
(Basis: Cumulative Increase)
6. The owner/operator of S-122, S-139 and/or S-140 may use an alternate material(s) other than the materials specified in Part 2 and/or usages in excess of those specified in Part 2, provided that the owner/operator can demonstrate that all of the following are satisfied:
  - a. Total POC emissions from S-122 shall not exceed 4.095 tons in any consecutive twelve-month period; and/or total NPOC emissions from S-122 shall be zero in any consecutive twelve-month period.
  - b. Total POC and methane emissions combined from S-139 shall not exceed 3.206 tons in any consecutive twelve-month period;
  - c. Total POC and methane emissions combined from S-140 shall not exceed 2.623 tons in any consecutive twelve-month period;



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-122, S-139, & S-140**

**Condition No. 27816**

**Plant No. 21359**

**Application No. 31157**

- d. Total POC emissions from S-122 shall not exceed 22 pounds in any calendar day; and/or total NPOC emissions from S-122 shall be zero pounds in any calendar day;
- e. Total POC and methane emissions combined from S-139 shall not exceed 49 pounds in any calendar day;
- f. Total POC and methane emissions combined emissions from S-140 shall not exceed 94 pounds in calendar day; and
- g. The use of these materials does not increase toxic emissions equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.

(Basis: Cumulative Increase; Toxics)

- 7. To determine compliance with the above parts, the owner/operator of S-122, S-139 and/or S-140 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:
  - a. Quantities, vapor pressures and emission calculations of each type of material stored at S-122, S-139 and S-140 on a daily basis.
  - b. If a material other than those specified in Part 2 is used, POC, NPOC, methane and/or toxic component contents of each material used; and mass emission calculations to demonstrate compliance with Part 6, on a daily basis;
  - c. daily throughput and/or emission calculations shall be totaled for each consecutive twelvemonth period.All records shall be retained on-site for at least five years, from the date of entry, and made available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations. (Basis: Cumulative Increase; Toxics)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-465, -599, & S-1010**

**Condition No. 27817**

**Plant No. 21359**

**Application No. 31157**

Sources S465, Sulfur Pit

abated by S1010, Sulfur Recovery Unit This condition was amended by Application 13424 in October, 2007, and by Application 10994 on October 31, 2008. Amended by Rodeo Renewed Project, Application 31157 (2022)

1. Delete S-301, S-302 and S-303 are shut down with Rodeo Renewed Project.
2. The owner/operator shall ensure that the throughput of molten sulfur at S465 does not exceed 73,000 long tons per consecutive 12-month period. [Cumulative Increase]
3. The owner/operator shall ensure that S465, Sulfur Pit, is controlled at all times by S1010, Sulfur Recovery Unit. [Cumulative increase, Regulation 2-1-403 Permit Conditions]
4. Deleted. S301 shut down
5. Deleted. S302 shut down
6. Deleted. S-303 shut down
7. Delete S-301, S-302 and S-303 are shut down with Rodeo Renewed Project.
8. Delete S-301, S-302 and S-303 are shut down with Rodeo Renewed Project.
9. The owner/operator shall maintain monthly records of throughput at S465. The owner/operator shall keep the record of the molten sulfur throughput on file at all times. These records shall be maintained on site for a minimum of 5 years and shall be made available to District staff upon request. [Cumulative Increase]

***End of Conditions***





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-503, S-504, S-505, S-599, & S-1010**

**Condition No. 27818**

**Plant No. 21359**

**Application No. 31157**

Source S1010, U235 Sulfur Recovery Unit, S503, Sulfur Storage Tank, S504, Sulfur Degassing Unit, S505, Sulfur Truck Loading Rack

Amended by Rodeo Renewed Project, Application 31157 (2022)

For the purposes of this condition, total reduced sulfur shall mean dimethyl disulfide, dimethyl sulfide, hydrogen sulfide, and methyl mercaptan; and reduced sulfur compounds shall mean hydrogen sulfide, carbonyl sulfide, and carbon disulfide.

1. The owner/operator shall ensure that the throughput of molten sulfur at S1010 does not exceed 200 long tons/day. [Cumulative Increase]
2. The owner/operator shall ensure that the throughput of molten sulfur at S503 does not exceed 471 long tons/day. [Cumulative Increase]
3. The owner/operator shall ensure that S1010 is abated at all times of operation by A48, SRU Tail Gas Treatment Unit, and A424, Incinerator. [Cumulative Increase]
4. The owner/operator shall ensure that S503, Sulfur Storage Tank, S504, Sulfur Degassing Unit, and S505, Sulfur Truck Loading Rack, are controlled at all times of operation by the Claus reaction furnace at S1010, Sulfur Recovery Unit. [Cumulative Increase, 2-1-305]
5. All pressure relief devices on S1010 shall be vented to a fuel gas recovery system, furnace, or flare with a recovery/destruction efficiency of 98%. [8-28-302, BACT]
6. The owner/operator shall ensure that the supplemental fuel used at A424, Tail Gas Incinerator, is PUC quality natural gas. [BACT]
7. The owner/operator shall not exceed the following emission concentrations from S1010/A48/A424:
  - a. SO<sub>2</sub> 50 ppmv, dry, @ 0% O<sub>2</sub>, 24-hour basis. [BACT]
  - b. CO 75 ppmvd, dry, @ 7% O<sub>2</sub>, 1-hour basis. [BACT]
  - c. NO<sub>x</sub> 42.2 ppmv, dry, @ 7% O<sub>2</sub>, 1-hour basis. [BACT]
- \*8. The owner/operator shall not exceed the following emission concentrations from S1010/A48/A424:
  - a. NH<sub>3</sub> 12.5 ppmv @ 7% O<sub>2</sub>, 24-hour basis [Regulation 2, Rule 5]
  - b. H<sub>2</sub>S: 2.5 ppmv @ 0% O<sub>2</sub>, 24-hour basis [Regulation 2, Rule 5]
9. The owner/operator shall not exceed the following hourly limits from S1010/A48/A424:
  - a. NO<sub>x</sub>: 8.0 lb/hr [2-1-305]
  - \*b. H<sub>2</sub>S: 0.23 lb/hr [Regulation 2, Rule 5]
  - \*c. NH<sub>3</sub>: 0.88 lb/hr [Regulation 2, Rule 5]
10. The owner/operator shall ensure that daily emissions, including startups, shutdowns, upsets, and malfunctions, from S1010/A48/A424 do not exceed the following limits:
  - a. Sulfuric acid mist: 31 lb/day [PSD]
  - b. PM<sub>10</sub>: 9.5 lb/day [2-1-301]
11. The owner/operator shall ensure that that annual emissions, including startups, shutdowns, upsets, and malfunctions, from S1010/A48/A424, do not exceed the following limits per any consecutive 12-month period:
  - a. SO<sub>2</sub>: 29.7 tons [BACT, Cumulative Increase]
  - b. NH<sub>3</sub>: 3.85 tons [Regulation 2, Rule 5]
  - c. CO: 37.9 tons [BACT, Cumulative Increase]
  - d. NO<sub>x</sub>: 11.2 tons [BACT, Cumulative Increase]
  - e. POC: 0.43 tons [Cumulative Increase]
  - f. PM<sub>10</sub>: 1.19 tons [Cumulative Increase]
  - g. Sulfuric acid mist: 5.65 tons [2-1-301]
  - \*h. H<sub>2</sub>S: 0.975 tons [Regulation 2, Rule 5]
  - i. Total Reduced Sulfur: 10 tons [PSD]
  - j. Reduced Sulfur Compounds: 10 tons [PSD]
  - k. H<sub>2</sub>S: 10 tons [PSD]
12. Prior to the commencement of construction, the owner/operator shall submit plans to the District's Source Test Division to obtain approval of the design and location of the source test ports. The



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-503, S-504, S-505, S-599, & S-1010**

**Condition No. 27818**

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- sample ports shall be installed in accordance with Manual of Procedures, Volume 4, Section 1.2.4. Ports for filterable particulate and PM10 testing shall be installed. [basis: Regulation 1-501]
13. No later than 90 days from the startup of S1010, the owner/operator shall conduct District-approved source tests to determine (1) initial compliance with the limits in Parts 7, 8, 9, and 13 for NO<sub>x</sub>, CO, POC, PM10, SO<sub>2</sub>, sulfuric acid mist, H<sub>2</sub>S, ammonia, (2) the BAAQMD Regulation 6 requirements below, and (3) the emission rates in lbs/dry standard cubic foot of NO<sub>x</sub>, POC, PM10, sulfuric acid mist, NH<sub>3</sub>, H<sub>2</sub>S, and reduced sulfur compounds. The owner/operator shall conduct the source tests in accordance with Part 19. The owner/operator shall submit the source test results to the District staff no later than 60 days after the source test. During the source test, the owner/operator shall determine the temperature required to achieve an outlet concentration of 2.5 ppmv H<sub>2</sub>S @ 0% O<sub>2</sub>, mass emissions of 0.23 lb/hr of H<sub>2</sub>S, mass emissions of 2.2 lb/hr of reduced sulfur compounds, and 2.2 lb/hr of total reduced sulfur, while meeting all other limits. The temperature shall become an enforceable limit.
- a. BAAQMD Regulation 6-1-310.1 and SIP Regulation 6-310: 0.15 gr PM/dscf
  - b. BAAQMD Regulation 6-1-311.1 and SIP Regulation 6-311: PM emissions based on Process Rate Weight
  - c. BAAQMD Regulation 6-1-330 and SIP Regulation 6-330: SO<sub>3</sub> and H<sub>2</sub>SO<sub>4</sub> limit
- Compliance with the 24-hour H<sub>2</sub>S and NH<sub>3</sub> concentration limits shall be shown using three 30-minute runs as provided by the test method, unless the owner/operator chooses to run the test for 24 hours. If the rate of reduced sulfur compounds, including H<sub>2</sub>S, exceeds 2.2 lb/hr, or if the rate of total reduced sulfur, including H<sub>2</sub>S, exceeds 2.2 lb/hr, the District reserves the right to require additional PSD analysis or to impose a higher temperature limit for A424, Incinerator, to control total reduced sulfur and reduced sulfur compounds.
- [BACT, Cumulative Increase; Regulation 2, Rule 5; BAAQMD Regulation 6; PSD, 40 CFR 64.6(d)]
14. After the initial source test required in part 13 of this condition, the owner/operator shall ensure that the minimum temperature of A424 shall not be lower than 1409 F. [Offsets, 40 CFR 64]
15. To determine compliance with the temperature limit in part 14, A424, Thermal Oxidizer, shall be equipped with a temperature measuring device capable of continuously measuring and recording the temperature in A424. The temperature monitor shall be installed prior to startup. The owner/operator shall install, and maintain in accordance with manufacturer's recommendations, a temperature measuring device that meets the following criteria: the minimum and maximum measurable temperatures with the device are 0 degrees F and 2,300 degrees F, respectively, and the minimum accuracy of the device over this temperature range shall be 1.0 percent of full-scale. [Regulation 1-521, 40 CFR 64.6(d)]
16. The temperature limit in part 14 shall not apply during an "Allowable Temperature Excursion", provided that the temperature controller setpoint complies with the temperature limit. For the purposes of parts 16 and 17 of this condition, a temperature excursion refers only to temperatures below the limit. An Allowable Temperature Excursion is one of the following:
- a. A temperature excursion not exceeding 20 degrees F; or
  - b. A temperature excursion for a period or periods which when combined are less than or equal to 15 minutes in any hour; or
  - c. A temperature excursion for a period or periods which when combined are more than 15 minutes in any hour, provided that all three of the following criteria are met.
    - i. the excursion does not exceed 50 degrees F;
    - ii. the duration of the excursion does not exceed 24 hours; and
    - iii. the total number of such excursions does not exceed 12 per calendar year (or any consecutive 12 month period).
- Two or more excursions greater than 15 minutes in duration occurring during the same 24-hour period shall be counted as one excursion toward the 12 excursion limit. [Regulation 2-1-403]



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**Source Nos. S-503, S-504, S-505, S-599, & S-1010**

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17. For each Allowable Temperature Excursion that exceeds 20 degrees F and 15 minutes in duration, the Permit Holder shall keep sufficient records to demonstrate that they meet the qualifying criteria described above. Records shall be retained for a minimum of five years from the date of entry, and shall be made available to the District upon request. Records shall include at least the following information:
  - a. Temperature controller setpoint;
  - b. Starting date and time, and duration of each Allowable Temperature Excursion;
  - c. Measured temperature during each Allowable Temperature Excursion;
  - d. Number of Allowable Temperature Excursions per month, and total number for the current calendar year; and
  - e. All strip charts or other temperature records. [Regulation 2-1-403]
18. For the purposes of parts 16 and 17 of this condition, a temperature excursion refers only to temperatures below the limit. (Basis: Regulation 2-1-403)
19. The owner/operator shall submit protocols for all source test procedures to the District's Source Test Section at least three weeks prior to conducting any tests. The owner/operator shall comply with all applicable testing requirements for continuous emissions monitors as specified in Volume V of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test Section, in writing, of the projected test dates at least 7 days prior to testing. [BACT, Cumulative Increase; Regulation 2, Rule 5]
20. The owner/operator shall perform an annual District-approved source test to verify compliance with the following requirements. A copy of the source test results shall be provided to the District Director of Compliance and Enforcement within 60 days of the test.
  - a. BAAQMD Regulation 6-1-310.1 and SIP Regulation 6-310: 0.15 gr PM/dscf
  - b. BAAQMD Regulation 6-1-311.1 and SIP Regulation 6-311: PM emissions based on Process Rate Weight
  - c. BAAQMD Regulation 6-1-330 and SIP Regulation 6-330: SO<sub>3</sub> and H<sub>2</sub>SO<sub>4</sub> limit
  - d. Emission rates in parts 7c, 8a, 8b, 9a, 9b, and 9c of this condition.
  - e. Emission rates of sulfuric acid mist, total reduced sulfur, and reduced sulfur compoundsCompliance with the 24-hour H<sub>2</sub>S concentration limit shall be shown using three 30-minute runs as provided by the test method, unless the owner/operator chooses to run the test for 24 hours. [BACT; BAAQMD Regulation 6, Rule 1 ; SIP Regulation 6; PSD; Regulation 2, Rule 5; Cumulative increase]
21. The owner/operator shall install, calibrate, maintain, and operate a District-approved continuous emission monitor (CEM) and recorder for exhaust gas flowrate, SO<sub>2</sub> and O<sub>2</sub>. The CEM shall be installed prior to startup. The owner/operator shall keep exhaust gas flow, SO<sub>2</sub> and O<sub>2</sub> data for at least five years and shall make these records available to the District upon request. The owner/operator shall measure SO<sub>2</sub> concentration and mass emissions on a clock-hour basis. The monitors shall comply with the requirements of 40 CFR 60.105, 40 CFR 63.1572, and the District's Manual of Procedures, Volume 5. [BACT, Cumulative Increase, Regulation 2-1-403 Permit Conditions; 40 CFR 64.6(c)(1), (c)(3), and (d); 40 CFR 63.1568(a)(1)(i)]
22. The owner/operator shall install, calibrate, maintain, and operate a District-approved continuous emission monitor (CEM) and recorder for exhaust gas flow and CO. The CEM shall be installed prior to startup. The CEM shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. The owner/operator shall keep flow and CO data for at least five years and shall make these records available to the District upon request. The owner/operator shall measure CO concentration and mass emissions on a clock-hour basis. The monitors shall comply the requirements of the District's Manual of Procedures, Volume 5. [BACT, Cumulative Increase; 40 CFR 64.6(c)(1) and (d)]
23. Deleted Application 13427



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**Source Nos. S-503, S-504, S-505, S-599, & S-1010**

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24. The owner/operator shall keep throughput records for sources S1010 and S503 on a daily basis. The records shall be kept on site for a period of at least 5 years and shall be made available for inspection by District staff upon request. [Cumulative Increase]
25. The owner/operator shall use the source tests required in parts 13 and 20 to determine compliance with the daily limit in part 10 and the annual limits in parts 11b, 11d, 11e, 11f, 11h, and 11i. At the end of every month, the owner/operator shall summarize the exhaust gas flow in dry standard cubic feet for the month and shall calculate the estimated emissions of each pollutant for the previous consecutive 12-month period and for H<sub>2</sub>S for each day of the month using the emission rate determined in the last source test. The summaries and calculations shall be completed within 60 days of the end of each month. Alternately, the owner/operator may establish a daily and monthly exhaust gas flow level after each source test that will ensure compliance with the daily and annual limits. In this case, the owner/operator will log the daily and monthly exhaust gas flows from S1010/A48/A424. [Cumulative increase; Regulation 2, Rule 5; Cumulative Increase, PSD]
26. The Owner/Operator shall perform a visible emissions check on Source S1010 on a monthly basis. The visible emissions check shall take place while the equipment is operating and during daylight hours. If any visible emissions are detected, the owner/operator shall have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures outlined in the CARB manual, "Visible Emissions Evaluation" for six (6) minutes within three (3) days and record the results of the reading. If the reading is in compliance with the Ringelmann 1.0 limit in BAAQMD Regulation 6-1-301, the reading shall be recorded and the owner/operator shall continue to perform a visible emissions check on a monthly basis. If the reading is not in compliance with the Ringelmann 1.0 limit in BAAQMD Regulation 6-1-301, the owner/operator shall take corrective action and report the violation in accordance with Standard Condition 1.F of the Title V permit. The certified smoke-reader shall continue to conduct the Method 9 or CARB Visible Emission Evaluation on a daily basis until the daily reading shows compliance with the applicable limit or until the equipment is shut down. Records of visible emissions checks and opacity readings made by a CARB-certified smoke reader shall be kept for a period of at least 5 years from date of entry and shall be made available to District staff upon request. [Basis: BAAQMD Regulations 6-1-301, 2-1-403; SIP Regulation 6]

Additional CAM conditions:

27. The owner/operator shall develop specifications for the location and installation of the temperature monitor to ensure that the temperature data is representative of the concentration of H<sub>2</sub>S, reduced sulfur compounds, and total reduced sulfur. [40 CFR 64.3(b)(1)]
28. The owner/operator shall develop verification procedures to confirm the operational status of the temperature monitoring prior to the date that monitoring must be conducted. [40 CFR 64.3(b)(2)]
29. The owner/operator shall develop quality assurance and control practices for the temperature monitoring. [40 CFR 64.3(b)(3)]
30. The owner/operator shall record the temperature at least 4 times per hour in a computerized data acquisition system, except during times of temperature monitor malfunction that comply with BAAQMD Regulation 1-523. [40 CFR 64.3(b)(4)]
31. The owner/operator shall determine that an exceedance of the temperature limit has occurred when the temperature drops below the limit set in accordance with part 13 of this condition; except that a limited number of excursions may occur without penalty in accordance with parts 16 through 18 of this condition. [40 CFR 64.6(c)(2)]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. A-626**

**Condition No. 27819**

**Plant No. 21359**

**Application No. 31157**

Amended by Rodeo Renewed Project, Application 31157 (2022) converted to fix roof tank and abated by carbon adsorption system.

1. The total throughput of renewable feedstock and other organic liquids at S97 shall not exceed 15.571 million barrels in any consecutive rolling 12 month period and/or 42,660 barrels in any calendar day. The tank shall only store renewable feedstocks upon startup of any source covered in Application 31157.  
[BACT, Cumulative Increase]
2. Delete, tank is abated by carbon adsorption system in Rodeo Renewed Project, Application 31157
3. Monthly records of the throughput of each material processed at this tank and corresponding vapor pressure of each material and emission calculations shall be kept in a District approved log for at least 5 years and shall be made available to the Air District upon request. [Cumulative Increase]
4. The owner/operator shall vent Source S-97 emissions to Abatement Device A-626, two activated carbon vessels, arranged in parallel at all times, while two additional spare vessels are connected and on standby. The owner/operator of S-97 and A-626 shall not exceed 2,911 scfm. (basis: Cumulative Increase, Odor Control, Offsets)
5. The owner/operator of S-97 shall not exceed 10 ppmv (measured as methane, C1) at the outlet of both Activated Carbon Vessels (A-626).  
(Basis: Regulation 2-2-208 Cumulative Increase)
6. The owner/operator of S-97 shall monitor for TOCs/POCs with a GC analyzer, flame-ionization detector (FID), or other method approved in writing by the Air Pollution Control Officer at the following locations:
  - a. At the inlet to the carbon vessel that are in operation.
  - b. At the outlet of the carbon vessel that are in operation.When using an FID to monitor breakthrough, readings may be taken with and without a carbon filter tip fitted on the FID probe. Concentrations measured with the carbon filter tip in place shall be considered methane for the purposes of these permit conditions. (basis: Cumulative Increase, Offsets)
7. The owner/operator of S-97 shall record these monitor readings in a monitoring log at the time they are taken. The monitoring results shall be used to estimate the frequency of carbon change-out necessary to maintain compliance with Parts 5 and 8 and shall be conducted on a daily basis. (basis: Cumulative Increase)
8. The owner/operator of S-97 and A-626 shall change the last carbon vessel with unspent carbon upon detection at its outlet of 10 ppmv (measured as C1). (basis: Cumulative Increase)
9. The owner/operator of S-97 shall maintain the following records for each day of operation of the source:
  - a. Each monitor reading or analysis result for the day of operation they are taken.
  - b. The number of carbon vessels removed from service.
  - c. Quantities, vapor pressures and emission calculations of each type of material stored at S-97 on a daily basis.
  - d. Daily throughput and/or emission calculations of POC and/or NPOC shall be totaled for each month and consecutive twelve month period.(basis: Cumulative Increase)
10. All measurements, records and data required to be maintained by the owner/operator shall be retained and made available for inspection by the Air District for at least five years following the date the data is recorded. (basis: Cumulative Increase)
11. The owner/operator of S-97 shall not exceed all of the following:



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**Source Nos. A-626**

**Condition No. 27819**

**Plant No. 21359**

**Application No. 31157**

- a. Total POC emissions from S-97 shall not exceed 0.316 tons in any consecutive twelve month period;
- b. Total POC emissions from S-97 shall not exceed 1.7 pounds in any calendar day;
- c. Total NPOC emissions from S-97 shall be zero in any calendar day and/or in any consecutive twelve month period.

(basis: Cumulative Increase)

***End of Conditions***





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-126**

**Condition No. 27820**

**Plant No. 21359**

**Application No. 31157**

Amended by Renewed Fuel Project, Application 31157 (2022)

1. The owner/operator of S-126 shall ensure that following total throughput limits are not exceeded: 594,845 barrels of gasoline, naphtha and/or renewable naphtha combined in any consecutive rolling 12-month period; and/or 28,800 barrels of gasoline and/or renewable naphtha combined in any calendar day. [Basis: Cumulative Increase]
2. The owner/operator shall only store the following in S-126:  
Organic liquids with a reid vapor pressure less than or equal to 9 psia.  
[Basis: Cumulative Increase]
3. Deleted, recordkeeping is replaced by Part 5 in A/N 31157
4. The owner/operator of S-126 may use an alternate material(s) other than the specific materials specified in Part 1 and/or usages in excess of those specified in Part 1, provided that the owner/operator can demonstrate that all of the following are satisfied:
  - a. Total POC emissions from S-126 shall not exceed 1.682 tons in any consecutive twelve month period;
  - b. Total POC emissions from S-126 shall not exceed 9.2 pounds in any calendar day;
  - c. Total NPOC emissions from S-126 shall be zero in any calendar day and/or in any consecutive twelve month period;
  - d. The use of these materials does not increase toxic emissions equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.  
(Basis: Cumulative Increase; Toxics)
5. To determine compliance with the above parts, the owner/operator of S-126 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:
  - a. Quantities, vapor pressures, and emission calculations of each type of material stored at S-126 on a daily basis.
  - b. If a material other than those specified in Part 1 is used, POC, NPOC, and/or toxic component contents of each material used; and mass emission calculations to demonstrate compliance with Part 4 on a daily basis;
  - c. daily throughput and/or emission calculations shall be totaled for each consecutive twelve month period. All records shall be retained on-site at least for five years, from the date of entry, and made available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations. (Basis: Cumulative Increase; Toxics)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-341**

**Condition No. 27821**

**Plant No. 21359**

**Application No. 31157**

Amended by Rodeo Renewed Project, Application 31157 (2022)

1. The owner/operator of S-341 shall ensure that following total throughput limits are not exceeded: 1,819,583 barrels of gasoline and/or renewable jet combined in any consecutive rolling 12-month period; and/or 12,000 barrels of gasoline and/or renewable jet combined in any calendar day.  
[Basis: Cumulative Increase]
2. The owner/operator shall only store the following in S-341:  
Organic liquids with a true vapor pressure less than or equal to 3.0 psia.  
[Basis: Cumulative Increase]
3. Deleted, recordkeeping is replaced by Part 5 in A/N 31157
4. The owner/operator of S-341 may use an alternate material(s) other than the specific materials specified in Part 1 and/or usages in excess of those specified in Part 1, provided that the owner/operator can demonstrate that all of the following are satisfied:
  - a. Total POC emissions from S-341 shall not exceed 1.380 tons in any consecutive twelve month period;
  - b. Total POC emissions from S-341 shall not exceed 7.6 pounds in any calendar day;
  - c. Total NPOC emissions from S-341 shall be zero in any calendar day and/or in any consecutive twelve month period;
  - d. The use of these materials does not increase toxic emissions equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.  
(Basis: Cumulative Increase; Toxics)
5. To determine compliance with the above parts, the owner/operator of S-341 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:
  - a. Quantities, vapor pressures, and emission calculations of each type of material stored at S-341 on a daily basis.
  - b. If a material other than those specified in Part 1 is used, POC, NPOC and/or toxic component contents of each material used; and mass emission calculations to demonstrate compliance with Part 4 on a daily basis;
  - c. daily throughput and/or emission calculations shall be totaled for each consecutive twelvemonth period. All records shall be retained on-site for at least five years, from the date of entry, and made available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations. (Basis: Cumulative Increase; Toxics)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-342**

**Condition No. 27822**

**Plant No. 21359**

**Application No. 31157**

Amended by Rodeo Renewed Project, Application 31157 (2022)

1. The owner/operator of S-342 shall ensure that following total throughput limits are not exceeded 2,407,700 barrels of gasoline and/or renewable jet combined in any consecutive rolling 12-month period; and/or 12,000 barrels of gasoline, and/or renewable jet combined in any calendar day.  
[Basis: Cumulative Increase]
2. The owner/operator shall only store the following in S-342:  
Organic liquids with a true vapor pressure less than or equal to 0.5 psia.  
[Basis: Cumulative Increase]
3. Deleted, recordkeeping is replaced by Part 5 in A/N 31157
4. The owner/operator of S-342 may use an alternate material(s) other than the specific materials specified in Part 1 and/or usages in excess of those specified in Part 1, provided that the owner/operator can demonstrate that all of the following are satisfied:
  - a. Total POC emissions from S-342 shall not exceed 0.394 tons in any consecutive twelve-month period;
  - b. Total POC emissions from S-342 shall not exceed 2.2 pounds in any calendar day;
  - c. Total NPOC emissions from S-342 shall be zero in any calendar day and/or in any consecutive twelve-month period;
  - d. The use of these materials does not increase toxic emissions equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.  
(Basis: Cumulative Increase; Toxics)
5. To determine compliance with the above parts, the owner/operator of S-342 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:
  - a. Quantities, vapor pressures, and emission calculations of each type of material stored at S-342 on a daily basis.
  - b. If a material other than those specified in Part 1 is used, POC, NPOC and/or toxic component contents of each material used; and mass emission calculations to demonstrate compliance with Part 4 on a daily basis;
  - c. daily throughput and/or emission calculations shall be totaled for each consecutive twelvemonth period. All records shall be retained on-site for five years, from the date of entry, and made available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations. (Basis: Cumulative Increase; Toxics)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-261**

**Condition No. 27823**

**Plant No. 21359**

**Application No. 31157**

Tanks is exempt in by Rodeo Renewed Project, Application 31157 (2022)

1. Deleted, exempt tank.
2. The owner/operator shall operate S261 with closed, gasketed covers on all tank openings except pressure relief valves and vacuum breaker valves. The owner/operator shall equip S261 with a BAAQMD approved roof with liquid mounted primary seal that meets the design criteria of BAAQMD Regulation 8-5-321.3 and secondary seal that meets the design criteria of BAAQMD Regulation 8-5-322.5. The owner/operator shall ensure that there are no ungasketed roof penetrations, no slotted pipe guide poles unless equipped with float and wiper seals, and no adjustable roof legs unless fitted with vapor seal boots or equivalent. [Cumulative increase].
3. Deleted, exempt tank.

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-340**

**Condition No. 27824**

**Plant No. 21359**

**Application No. 31157**

For Sources S340 (Tank 108). Amended by Application 31157 (2022), Tank will be exempt after startup of sources within AN 31157. New condition 27646, Part 21 requires notification for the permits in order to issue letters of exemption.

1. Deleted, exempt tank.
2. Deleted, exempt tank.
3. The owner/operator shall operate S340 with closed, gasketed covers on all tank openings except pressure relief valves and vacuum breaker valves. The owner/operator shall equip S340 with a BAAQMD approved roof with liquid mounted primary seal that meets the design criteria of BAAQMD Regulation 8-5-321.3 and secondary seal that meets the design criteria of BAAQMD Regulation 8-5-322.5. The owner/operator shall ensure that there are no ungasketed roof penetrations, no slotted pipe guide poles unless equipped with float and wiper seals, and no adjustable roof legs unless fitted with vapor seal boots or equivalent. [BACT, cumulative increase]
4. Deleted. Exempt tank.

***End of Conditions***



**BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT**

January 20, 2023

Phillips 66 Company – San Francisco Refinery  
1380 San Pablo Avenue  
Rodeo, CA 94572

Attention: Wilma Dreesen

Application Number: 31157  
Plant Number: 21359  
Equipment Location: *same as above*

Dear Applicant:

SUBJECT: LETTER OF EXEMPTION

We have completed our evaluation of your permit application and have determined that the equipment described are exempt from permitting per the following:

Source Number	Equipment Description	Condition No.	Exemption Citation
S-70	Rail Renewable Feedstock Unloading Rack (formerly Butane Loading Rack), abated by A-7 Vapor Recovery System	None	2-1-123.3.2 and 2-1-123.3.6
S-90	TANK NO. 67, 2100 thousand gallons	None	2-1-123.3.2 and 2-1-123.3.6
S-99	TANK NO. 102, 7140 thousand gallons	None	2-1-123.3.2
S-103	TANK NO. 106, 3276 thousand gallons	None	2-1-123.3.2
S-105	TANK NO. 129, 3066 thousand gallons	None	2-1-123.3.2
S-108	TANK NO. 153, 5586 thousand gallons	None	2-1-123.3.2 and 2-1-123.3.6
S-127	TANK NO. 173, 3024 thousand gallons	None	2-1-123.3.2
S-188	TANK NO. 300, 378 thousand gallons, abated by A-7, Vapor Recovery System,	None	2-1-123.3.1
S-189	TANK NO. 301, 189 thousand gallons, abated by A-7, Vapor Recovery System,	None	2-1-123.3.1
S-190	TANK NO. 302, 756 thousand gallons, abated by A-7, Vapor Recovery System,	None	2-1-123.3.1
S-204	TANK NO. 528, 1806 thousand gallons	None	2-1-123.3.2 and 2-1-123.3.6
S-205	TANK NO. 529, 1806 thousand gallons	None	2-1-123.3.2 and 2-1-123.3.6
S-253	TANK NO. 833, 189 thousand gallons, abated by A-7, Vapor Recovery System,	None	2-1-123.3.1
S-262	TANK NO. 1011, 4368 thousand gallons	None	2-1-123.3.2
S-263	Tank 1012, 4200 thousand gallons	None	2-1-123.3.2
S-456	U110 Cooling Tower, 750 gpm	22122	2-1-128.4
S-500	ULSD Cooling Tower, 7639 gpm	27812	2-1-128.4
S-601	Bleaching Earth Storage Silos (12), each abated by A-627 through A-638 Pulse Jet Dust Houses (12), 1,600 dscfm maximum each	None	2-1-115.1.4.4
S-604	Bleaching Earth Adsorption Day Hoppers (6), 665 dscfm maximum each, abated by A-639 through A-644 Dust Filters (6), 665 dscfm maximum each	None	2-1-115.1.4.5
S-607	Sulfuric Acid Tank (at S-600 Pretreatment Unit), 400 gallons	None	2-1-123.2.1



Source Number	Equipment Description	Condition No.	Exemption Citation
S-608	Citric Acid Tank (at S-600 Pretreatment Unit), 16,100 gallons	None	2-1-123.2
S-609	Sodium Hydroxide Tank (at S-600 Pretreatment Unit), 5160 gallons	None	2-1-123.2
S-610	Coagulant Tank (at S-600 Pretreatment Unit), 400 gallons	None	2-1-123.2
S-611	Polymer Tank (at S-600 Pretreatment Unit), 400 gallons	None	2-1-123.2
S-614	Wet Surface Air Cooler (at S-600 Pretreatment Unit)	27660	2-1-128.4
S-615	Evaporator (at S-600 Pretreatment Unit), abated by A-622 and A-624 Biofilters and A-623 and A-625 Carbon Adsorption Systems	None	2-1-103
S-617	Renewable Feedstock Truck Unloading Operation	None	2-1-123.3.6
S-618	Sulfuric Acid Tank (at S-600 Pretreatment Unit), 400 gallons	None	2-1-123.2.1
S-619	Sulfiding Agent Vessel (at S-307 U240 UNICRACKING UNIT 240), 12,850 gallons	None	2-1-123.2.1
S-620	Sulfiding Agent Vessel (at S-307 U240 UNICRACKING UNIT 240), 12,850 gallons	None	2-1-123.2.1
S-621	Sulfiding Agent Vessel (at S-434 U246 High Pressure Reactor Train), 12,850 gallons	None	2-1-123.2.1
S-32120	Tank 224, 110,000 bbls	None	2-1-123.3.2 and 2-1-123.3.6
A-627	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4
A-628	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4
A-629	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4
A-630	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4
A-631	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4
A-632	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4
A-633	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4
A-634	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4
A-635	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4
A-636	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4
A-637	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4
A-638	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4
A-639	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4
A-640	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4
A-641	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4
A-642	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4
A-643	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4
A-644	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM <sub>10</sub> maximum	None	2-1-113.2.4

Text of exemption citations and conditions are attached.

This exemption applies solely to permits. The equipment must be operated in compliance with any applicable District regulations and with other regulatory agency requirements. The Air District's regulations may be viewed online at [www.baaqmd.gov/](http://www.baaqmd.gov/). Note that this exemption is not permanent. Any change in your operation or in District regulations may require you to obtain permits in the future.

Please include your application number with any correspondence with the Air District. If you have any questions on this matter, please contact **Jimmy C. Cheng** at (415) 749-5022 or [jcheng@baaqmd.gov](mailto:jcheng@baaqmd.gov).

Very truly yours,



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SHARON L. LANDERS  
INTERIM EXECUTIVE OFFICER/APCO

Multiple Citations



**Plant Name:** Phillips 66 Company – San Francisco Refinery

**Exempt Sources**

**Plant No. 21359**

**Application No. 31157**

### Exemption Citation Text

**2-1-103 Exemption, Source not Subject to any District Rule:** Any source that is not already exempt from the requirements of Section 2-1-301 and 302 as set forth in Sections 2-1-105 to 2-1-128, is exempt from Section 2-1-301 and 302 if the source meets all of the following criteria:

- 103.1 The source is not in a source category subject to any of the provisions of Regulation 6<sup>(1)</sup>, Regulation 8<sup>(2)</sup> excluding Rules 1 through 4, Regulations 9 through 12; and
- 103.2 The source is not subject to any of the provisions of Sections 2-1-316 through 319; and
- 103.3 Actual emissions of precursor organic compounds (POC), non-precursor organic compounds (NPOC), nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), PM<sub>10</sub> and carbon monoxide (CO) from the source are each less than 10 pounds per highest day. A source also satisfies this criterion if actual emissions of each pollutant are greater than 10 lb/highest day, but total emissions are less than 150 pounds per year, per pollutant.  
Note 1: Typically, any source may be subject to Regulation 6, Particulate Matter and Visible Emissions. For the purposes of this section, Regulation 6 applicability shall be limited to the following types of sources that emit PM<sub>10</sub>: combustion source; material handling/processing; sand, gravel or rock processing; cement, concrete and asphaltic concrete production; tub grinder; or similar PM<sub>10</sub>-emitting source, as deemed by the APCO.  
Note 2: If an exemption in a Regulation 8 Rule indicates that the source is subject to Regulation 8, Rules 1 through 4, then the source must comply with all applicable provisions of Regulation 8, Rules 1 through 4, to qualify for this exemption.
- 103.4 The source is not an ozone generator (a piece of equipment designed to generate ozone) emitting 1 lb/day or more of ozone.

*(Adopted 6/7/95; Amended 5/17/00; 12/21/04)*

**2-1-113 Exemption, Sources and Operations:**

- 113.2 The following sources and operations are exempt from the requirements of Sections 2-1-301 and 302:
  - 2.1 Road construction, widening and rerouting.
  - 2.2 Restaurants, cafeterias and other retail establishments for the purpose of preparing food for human consumption.
  - 2.3 Structural changes which do not change the quality, nature or quantity of air contaminant emissions.
  - 2.4 Any abatement device which is used solely to abate equipment that does not require an Authority to Construct or Permit to Operate.
  - 2.5 Architectural and industrial maintenance coating operations that are exclusively subject to Regulation 8, Rules 3 or 48, because coatings are applied to stationary structures, their appurtenances, to mobile homes, to pavements, or to curbs. This does not apply to coatings applied by the manufacturer prior to installation, nor to the coating of components removed from such structures and equipment.
  - 2.6 Portable abatement equipment exclusively used to comply with the tank degassing control requirements of Regulation 8, Rule 5 and/or Regulation 8, Rule 40.
  - 2.7 Equipment that transports, holds or stores California Public Utilities Commission regulated natural gas, excluding drivers.
  - 2.8 Deleted May 17, 2000
  - 2.9 Deleted May 17, 2000
  - 2.10 Deleted May 17, 2000
  - 2.11 Teaching laboratories used exclusively for classroom experimentation and/or demonstration.
  - 2.12 Laboratories located in a building where the total laboratory floor space within the building is less than 25,000 square feet, or the total number of fume hoods within the building is less than 50, provided that Responsible Laboratory Management Practices, as defined in Section 2-1-224, are used. Buildings connected by passageways and/or corridors shall be considered as separate buildings, provided that structural integrity



**Plant Name:** Phillips 66 Company - San Francisco Refinery

**Exempt Sources**

**Plant No. 21359**

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could be maintained in the absence of the passageways and/or corridors and the buildings have their own separate and independently operating HVAC and fire suppression systems. For the purposes of this subsection, teaching laboratories that are exempt per Section 2-1-113.2.11 are not included in the floor space or fume hood totals. In addition, laboratory units for which the owner or operator of the source can demonstrate that toxic air contaminant emissions would not occur, except under accidental or upset conditions, are not included in the floor space or fume hood totals.

**2.13** Maintenance operations on natural gas pipelines and associated equipment, provided that emissions from such operations consist solely of residual natural gas that is vented after the equipment is isolated or shut down.

**2.14** [Deleted 12/19/2012]

**2.15** Asbestos and asbestos containing material renovation or removal conducted in compliance with Regulation 11, Rule 2 and Regulation 3.

**2.16** Closed landfills that have less than 1,000,000 tons of decomposable solid waste in place and that do not have an operating landfill gas collection system.

**2.17** Closed landfills that have not accepted waste for at least 30 years and that never had a landfill gas collection system.

**2.18** Construction of a building or structure that is not itself a source requiring a permit.

*(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00; 11/15/00; 5/2/01; 7/19/06)*

**2-1-115 Exemption, Particulate Sources at Quarries, Mineral Processing and Biomass Facilities:** The following potential PM<sub>10</sub> sources are exempt from the requirements of sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

**115.1** Sources located at quarrying; mineral or ore handling or processing; concrete production; asphaltic concrete production; marine bulk transfer stations; concrete or asphaltic concrete recycling; vehicle shredding; glass manufacturing; handling or processing of cement, coke, lime, flyash, fertilizer, or catalyst; or other similar facility which meets one of the following:

**1.1** Mixer and other ancillary sources at concrete or aggregate product production facilities with a maximum rated production capacity less than 15 cubic yards (yd<sup>3</sup>) per hour;

**1.2** Other source at a facility with a maximum throughput less than 5000 tons per year;

**1.3** Operating, loading and unloading a crusher or grinder which processes exclusively material with a moisture content greater than or equal to 20 percent by weight;

**1.4** Operating, loading and unloading the following sources which process exclusively material with a moisture content greater than or equal to 5 percent by weight:

**1.4.1** Screen or other size classification;

**1.4.2** Conveyor, screw, auger, stacker or bucket elevator;

**1.4.3** Grizzly, or other material loading or unloading;

**1.4.4** Storage silos;

**1.4.5** Storage or weigh hopper/bin system.

**1.5** Haul or access roads;

**1.6** Drilling or blasting.

*(Amended 6/7/95; 5/17/00)*

**2-1-123 Exemption, Liquid Storage and Loading Equipment:** The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

**123.1** Storage tanks and storage vessels having a capacity of less than 260 gallons.

**123.2** Tanks, vessels and pumping equipment used exclusively for the storage or dispensing of any aqueous solution which contains less than 1 percent (wt) organic compounds. Tanks and vessels storing the following materials are not exempt.

**2.1** Sulfuric acid with an acid strength of more than 99.0% by weight.

**2.2** Phosphoric acid with an acid strength of more than 99.0% by weight.

**2.3** Nitric acid with an acid strength of more than 70.0% by weight.

**2.4** Hydrochloric acid with an acid strength of more than 30.0% by weight.

**2.5** Hydrofluoric acid with an acid strength of more than 30.0% by weight.



**Plant Name:** Phillips 66 Company - San Francisco Refinery

**Exempt Sources**

**Plant No. 21359**

**Application No. 31157**

- 2.6 More than one liquid phase, where the top phase contains more than one percent VOC (wt).
- 123.3 Containers, reservoirs, tanks or loading equipment used exclusively for:
- 3.1 Storage or loading of liquefied gases.
  - 3.2 Storage or loading of organic liquids or mixtures containing organic liquids; where the initial boiling point of the organics is greater than 302°F and exceeds the actual storage temperature by at least 180°F. This exemption does not apply to the storage or loading of asphalt or asphalt emulsion with a sulfur content equal to or greater than 0.5 wt%.
  - 3.3 The storage or loading of petroleum oils with an ASTM D-93 (PMCC) flash point of 130°F or higher, when stored or loaded at a temperature at least 36°F below the flash point.
  - 3.4 The storage or loading of lubricating oils.
  - 3.5 The storage of fuel oils with a gravity of 40 API or lower and having a capacity of 10,000 gallons or less.
  - 3.6 The storage or loading of liquid soaps, liquid detergents, tallow, or vegetable oils, waxes or wax emulsions.
  - 3.7 The storage of asphalt or asphalt emulsion with a sulfur content of less than 0.5 wt%. This does not include the storage of asphalt cutback with hydrocarbons having an initial boiling point of less than 302°F.
  - 3.8 The storage of wine, beer or other alcoholic beverages.
  - 3.9 The storage of organic salts or solids in an aqueous solution or suspension, provided that no liquid hydrocarbon layer forms on top of the aqueous phase.
  - 3.10 The storage or loading of fuel oils with a gravity of 25 API or lower.
  - 3.11 The storage and/or transfer of an asphalt-water emulsion heated to 150°F or less.
- 123.4 Tank seal replacement. For any tank subject to Regulation 8, Rule 5, any new seal must comply with the applicable provisions of Regulation 8, Rule 5, and the District must receive written notification of the tank source number and seal type at least three days prior to the installation.

*(Adopted 10/19/83; Amended 7/11/84; 7/17/91; 6/7/95; 5/17/00)*

**2-1-128 Exemption, Miscellaneous Equipment:** The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 128.4 Water cooling towers and water cooling ponds not used for evaporative cooling of process water, or not used for evaporative cooling of water from barometric jets or from barometric condensers.

*(Adopted 10/19/83; Amended 7/16/86; 7/17/91; 6/7/95; 5/17/00; 11/15/00; 12/21/04)*



**Plant Name:** Phillips 66 Company - San Francisco Refinery

**Condition No. 22122**

**Plant No. 21359**

**Application No. 31157**

For Source S456, Cooling Tower (Application 10349)

1. Deleted.
2. The owner/operator shall sample the cooling tower water at least once per month and subject the sample to a District approved laboratory analysis to determine its total dissolved solids content. [basis: Regulations 2-6-503, 3]
3. Deleted.
4. Deleted.
5. Deleted.
6. The owner/operator shall use the total dissolved solids monitoring to estimate annual emissions of particulate from the cooling tower. The estimated annual emissions shall be reported to the Engineering Divisions by June 30<sup>th</sup> of each year as part of the annual update. The owner/operator shall use this estimate to confirm that the cooling tower has not emitted more than 5 tons particulate per year. [Regulation 2-6-501, 3]
7. The owner/operator shall maintain the following records for five years from the date of record:
  - a. Deleted.
  - b. Records of monthly determination of total dissolved solids
  - c. Deleted.
  - d. Deleted.(Regulation 2-6-501)

***End of Conditions***





**Plant Name:** Phillips 66 Company - San Francisco Refinery

**Condition No. 27660**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance): Phillips 66 Rodeo Renewed Project.

S-453 U230 Cooling Tower

S-455 U240 Cooling Tower

S-614 Wet Surface Air Cooler (WSAC) at S-600 Pretreatment Unit (exempt per Regulation 2-1-128.4)

1. The owner/operator of S-453 Cooling Tower shall not exceed a total recirculation water throughput of 13,500 gallons per minute and/or 7,095.6 million gallons during any consecutive 12-month period. (Basis: Regulation 2-1-403 Permit Conditions)
2. The owner/operator of S-455 Cooling Tower shall not exceed a total recirculation water throughput of 33,000 gallons per minute and/or 17,344.8 million gallons during any consecutive 12-month period. (Basis: Regulation 2-1-403 Permit Conditions)
3. The owner/operator of S-453 and S-455 shall not exceed any of the following limits:
  - a. TOC (POC and/or NPOC combined) for S-453 = 13.62 pounds in any calendar day and/or 2.49 tons in any consecutive 12-month period
  - b. TOC (POC and/or NPOC combined) for S-455 = 33.29 pounds in any calendar day and/or 6.08 tons in any consecutive 12-month period
  - c.  $PM_{10} = PM_{2.5}$  for S-453 = 3.18 pounds in any calendar day and/or 0.58 tons in any consecutive 12-month period
  - d.  $PM_{10} = PM_{2.5}$  for S-455 = 8.11 pounds in any calendar day and/or 1.48 tons in any consecutive 12-month period(Basis: Regulation 2-1-403 Permit Conditions)
4. The owner/operator of S-453 and/or S-455 shall ensure the TOC content of cooling water shall not exceed the action trigger level of 84 ppbw. Within 30 days of the Rodeo Renewed Project startup of S-453 and/or 455, the owner/operator of each S-453 and/or S-455 shall take sample of the cooling water return line at least once every week (52 samples per consecutive 12 month period) using EPA Method 8015D or any other Air District approved method. After six consecutive months, the owner/operator of S-453 and S-455 may elect to move to a bi-monthly sampling schedule (two samples every month) provided weekly sampling results do not exceed 84 ppbw for six consecutive months (26 consecutive weekly samples). In the event that any sampling result from S-453 and /or S-455 exceeds 84 ppbw, the owner/operator shall revert to the weekly sampling schedule. (Basis: Regulation 11-10)
5. The owner/operator of S-453 and S-455 Cooling Towers shall not exceed a total dissolved solids (TDS) content in the cooling water of 1,964 ppmw and/or 2047 ppmw (averaged over any consecutive 30-day period), respectively. Compliance with the above TDS concentration limit shall be based on the daily conductivity measurements that shall be taken at the cooling water sump basis at least once per operating shift and in concert with a correlation factor of 0.67 mg/L per microohm. (Basis: Regulation 2-1-403 Permit Conditions)
6. The operator/owner of the S-453 and S-455 Cooling Towers shall maintain documentation, written and provided by the vendor/manufacture, of the guaranteed maximum cooling water drift rate of 0.001 % and the premise, basis, and justification for the drift rate. (Basis: Regulation 2-1-403 Permit Conditions)
7. The owner/operator of each S-453 and S-455 shall install an Air District approved properly operated and properly maintained per manufacturer's specifications non-resettable totalized flow meter that measures the total water flow rate (recirculation and added flow rates). (Basis: Regulation 2-1-403 Permit Conditions)
8. The owner/operator of the S-453, S-455 Cooling Towers and S-614 (WSAC), shall maintain in an Air District approved log, all water usage, recirculation rates, monitoring, source test, vendor/manufacture's specifications, and other records as required to demonstrate compliance with the above conditions on site for at least five years from the date of data entry, and shall be made available to the Air District's staff for inspection upon request. (Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-5)



**Plant Name:** Phillips 66 Company - San Francisco Refinery

**Condition No. 27660**

**Plant No. 21359**

**Application No. 31157**

9. The owner/operator of S-614 Wet Surface Air Cooler (at S-600 Pretreatment Unit) shall conduct a quarterly Air District-approved sampling and testing required of total hydrocarbon concentration of cooling water at recirculation line to ensure no leakage of process water  
(Basis: Regulation 2-1-128.4, Cumulative increase)

***End of Conditions***



**Plant Name:** Phillips 66 Company - San Francisco Refinery

**Condition No. 27812**

**Plant No. 21359**

**Application No. 31157**

For Sources S452, S453, S455, S457, S458, S500, Cooling Towers (Applications 10349, 14112, 17465, 27798), Amended by Application 31157 - Condition 27646, part 1 is for S452, S457, and S458. New Condition 27660 was created for S-453 and S-455.

1. Deleted.
2. Deleted.
3. Deleted.
4. The owner/operator shall sample the cooling tower water at each cooling tower at least once per month and subject the sample to a District approved laboratory analysis to determine its total dissolved solids content. [Regulations 2-6-503, Regulation 3]
5. Deleted.
6. Deleted.
7. The owner/operator shall use the total dissolved solids monitoring to estimate annual emissions of particulate from the cooling towers. The estimated annual emissions shall be reported to the Engineering Divisions by June 30<sup>th</sup> of each year as part of the annual update. The owner/operator shall use this estimate to confirm that S452 or S500 has each not emitted more than 5 tons particulate per year. [Regulations 2-1-319.1, 3]
8. The owner/operator shall maintain the following records for five years from the date of record:
  - a. Deleted.
  - b. Deleted.
  - c. Deleted
  - d. Records of monthly determination of total dissolved solids
  - e. Deleted.
  - f. Deleted.[Regulation 2-6-501]

***End of Conditions***

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I am employed in the County of San Francisco, State of California. I am over the age of 18 and not a party to the within action. My business address is Alston & Bird LLP, 560 Mission Street, STE 2100, San Francisco, CA 94105.

☒ BY ELECTRONIC SERVICE TRANSMISSION: via Odyssey eFile CA, the said document(s) were uploaded and transmitted to the following email addressee(s) in accordance with the written agreement of counsel in this action.

☒ BY E-MAIL TRANSMISSION: via the electronic service address kaitlyn.schaefer@alston.com, the said document(s) were transmitted to the following email addressee(s).

Executed on September 1, 2023, at San Francisco, California.

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Kaitlyn Schaefer

1 ***Communities for a Better Environment, et al. v. County of Contra Costa, et al.***

2 **Case No. N22-1080**

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4 **SERVICE LIST**

5  
6 Ellison Folk, Esq.  
7 Joseph D. Petta, Esq.  
8 SHUTE, MIHALY & WEINBERGER LLP  
9 396 Hayes Street  
10 San Francisco, California 94102  
Tel.: (415) 552-7272  
Fax: (415) 552-5816  
Email: folk@smwlaw.com  
petta@smwlaw.com

Attorneys for Petitioners  
COMMUNITIES FOR A BETTER  
ENVIRONMENT and CENTER FOR  
BIOLOGICAL DIVERSITY

11 Deborah A. Sivas, Esq.  
12 Stephanie L. Safdi, Esq.  
13 Matthew J. Sanders, Esq.  
14 STANFORD  
15 ENVIRONMENTAL LAW CLINIC  
16 Stanford Law School  
17 559 Nathan Abbot Way  
18 Stanford, CA 94305  
Tel: (650) 723-0325  
Fax: (650) 723-4426  
Email: dsivas@stanford.edu  
ssafdi@stanford.edu  
matthewjsanders@stanford.edu

Attorneys for Petitioners  
COMMUNITIES FOR A BETTER  
ENVIRONMENT and CENTER FOR  
BIOLOGICAL DIVERSITY

19 Shana Lazerow, Esq.  
20 Constance Cho, Esq.  
21 COMMUNITIES FOR A BETTER  
22 ENVIRONMENT  
23 6325 Pacific Blvd., Suite 300  
24 Huntington Park, CA 90255  
Tel: (323) 826-9771  
Fax: (323) 588-7079  
Email: slazerow@cbecal.org  
ccho@cbecal.org

Attorneys for Petitioner  
COMMUNITIES FOR A BETTER  
ENVIRONMENT

1  
2 Victoria Bogdan Tejeda, Esq.  
3 Hollin Kretzmann, Esq.  
4 CENTER FOR BIOLOGICAL DIVERSITY  
5 1212 Broadway, Suite 800  
6 Oakland, CA 94612  
7 Tel: (310) 365-9281  
8 Fax: (510) 844-7150  
9 Email: vbogdantejeda@biologicaldiversity.org  
10 hkretzmann@biologicaldiversity.org  
11  
12

Attorneys for Petitioner  
CENTER FOR BIOLOGICAL  
DIVERSITY

13  
14  
15  
16  
17  
18  
19  
20  
21  
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23  
24  
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26  
27  
28  
Thomas L. Geiger, Esq.  
Kurtis C. Keller, Esq.  
CONTRA COSTA COUNTY OFFICE  
OF THE COUNTY COUNSEL  
1025 Escobar Street, Third Floor  
Martinez, CA 94553  
Tel: (925) 655-2200  
Fax: (925) 655-2263  
Email: kurtis.keller@cc.cccounty.us

Attorneys for Respondents  
COUNTY OF CONTRA COSTA, BOARD  
OF SUPERVISORS OF COUNTY OF  
CONTRA COSTA; and CONTRA COSTA  
COUNTY DEPARTMENT OF  
CONSERVATION AND DEVELOPMENT



# **APPENDIX C**

## **Revisions to the 2022 Draft EIR**

## 4 County-Initiated Updates and Errata to the Draft EIR

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### 4.1 Introduction

In accordance with CEQA Guidelines Section 15132(a), this chapter of the Final EIR provides changes to the Draft EIR that have been made to update, refine, or clarify Project information and mitigation measures presented in the Draft EIR. The edits are made either in response to a comment received on the Draft EIR, or initiated by County staff.

### 4.2 Text Changes to the Draft EIR

New text is indicated in double underline and text to be deleted is reflected by a ~~strike-through~~. Text changes are presented in the page order in which they appear in the Draft EIR. As indicated in Chapter 1, Introduction, the entirety of the EIR consists of the Draft EIR, together with this Response to Comments / Final EIR document, including all appendices. Therefore, the Draft EIR changes presented in this chapter are incorporated in and supersede corresponding original text in the Draft EIR.

### 4.3 Implication of Changes to the Draft EIR

Pursuant to CEQA Guidelines Section 15088.5(a), recirculation of a Draft EIR is required only if:

1. a new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented;
2. a substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance;
3. a feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it; or
4. the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

None of the changes to the Draft EIR identified in this document meet any of the above conditions. Therefore, recirculation of any part of the Draft EIR is not required. The information presented in the Draft EIR and this document support this determination by the County.

## Changes to Executive Summary

Executive Summary, Table ES-1 is revised as follows:

**Table ES-1. Rodeo Refinery Pre- and Post-Project Operational Activity**

	Baseline	Post-Project
<b>Product Material Received</b>		
Marine Terminal Crude and Gas Oil Received (1,000 bpd 12-month average)	35	0
Pipeline Crude Received (1,000 bpd 12-month average)	70	0
Renewable Feedstocks Received (1,000 bpd 12-month average) <sup>a</sup>	0	80
Gasoline and Blendstocks Received (1,000 bpd 12-month average)	10	38
<b>Product Shipped</b>		
Petroleum Products Shipped (1,000 bpd 12-month average)	121	40
Renewable Fuels Shipped (1,000 bpd 12-month average)	0	67
Treated Renewable Feedstock Shipped (1,000 bpd 12-month average)	0	25
<b>Mode of Transportation</b>		
Tanker Vessels (calls/year)	80	201
Barges (calls/year)	90	161
Carbon Plant Site Rail (average railcars per week)	6.96	0
Refinery Railcar Loading/Unloading Rack (average railcars per day)	4.7	16
Santa Maria Site Rail (railcars per year)	409	0
Refinery and Carbon Plant Truck Trips (roundtrips per year)	40,213	16,026
Santa Maria Site Truck Trips (roundtrips per year)	13,008	0
Rodeo Refinery Approximate Number of Employees and Contractors	650	650

Executive Summary, page xxii is revised as follows:

Pre- and post-Project operational activities are shown in Table ES-1. Once the Project is operational, no crude oil would be processed at the Rodeo Refinery. As shown in Table 3-2, the Rodeo Refinery would no longer receive crude oil and gas oil at its Marine Terminal (35,000 barrels per day [bpd]) on a 12-month rolling average) or from pipelines connecting the Rodeo Refinery to Central California crude supplies and the Santa Maria Refinery (70,000 bpd).

The references in the Draft EIR are not contained in Chapter 8. All references follow each chapter and section. The Executive Summary, page xxv is revised as follows:

- Chapter 7, Report Preparation.
- ~~Chapter 8, References.~~
- Appendix A, Notice of Preparation and Public Comments

The Executive Summary, Table ES-2 is revised as follows:

**Table ES-2. Summary of Alternatives**

	Project	No Project <sup>a</sup>	Reduced Project	Terminal Only <sup>c</sup>	No Temporary Increase in Crude Oil <sup>b</sup>
<b><u>Product Material Received/ Processed (bpd)</u></b>					
<u>Crude and Gas Oil Received</u>	<u>0</u>	<u>105,000<sup>e</sup></u>	<u>0</u>	<u>0</u>	<u>0</u>
Renewable Feedstock Received/Processed	80,000 <sup>c</sup>	0	55,000	<del>0</del> <del>0</del> <u>75,000<sup>f</sup></u>	80,000 <sup>c</sup>
Gasoline Blendstocks Received/Processed	38,000	<del>115,000</del> <u>10,000</u>	38,000		38,000
Existing Renewable Fuels Processed	13,000	13,000 <sup>d,h</sup>	13,000		13,000
<b><u>Product Produced (bpd)</u></b>					
Renewable Fuels Produced/Shipped	55,000 <sup>c</sup>	0	50,000	75,000 <sup>f</sup>	55,000 <sup>c</sup>
Existing Renewable Fuels Produced	12,000	12,000 <sup>d,h</sup>	12,000		12,000
<del>Conventional Fuels</del> <u>Petroleum Products Produced/Shipped</u>	40,000	<del>400</del> <u>109,000</u>	40,000		40,000
<u>Treated Renewable Feedstock Shipped</u>	<u>25,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	
<b><u>Mode of Transportation<sup>g</sup></u></b>					
Ships (annual visits)	201	80	165	70	201
Barges (annual visits)	161	90	161	40	161
Truck Trips (roundtrips/year)	16,026	53,221	11,230	0	16,026
Railcars (per day)	16	5	16	8	16
Employees	650	650	630	75	650

Notes:

- <sup>a</sup> No Project and Terminal Only Alternatives would transport blend stock and product by pipeline, marine vessel, and rail.
- <sup>b</sup> The No Temporary Increase in Crude Oil Alternative at full buildout is identical to the Project; it differs only in the temporary change in throughput of crude oil during the construction period, and associated vessel calls, which is not reflected in this table. This difference, however, is described in the following discussion.
- <sup>c</sup> Up to 25,000 bpd excess capacity of pre-treated feedstocks could be sold elsewhere.
- <sup>d</sup> As explained in the Project Description, Section 3.7, *Project Operation*, the facility currently has the capacity to produce approximately 12,000 bpd of renewable fuels from pretreated feedstocks using Unit 250, which was previously used to process petroleum-based feedstocks. Unit 250 is not included in the Project as the Project does not propose any changes for Unit 250 and it would continue to produce 12,000 bpd of renewable fuels. Given that Unit 250 is not part of the Project, Unit 250 feedstock and production numbers are not included in this chart under the No Project Alternative.
- <sup>e</sup> 70,000 bpd out of 105,000 bpd would arrive by pipeline, the rest would arrive through the Marine Terminal.
- <sup>f</sup> Blendstocks and product into the facility would arrive through the Marine Terminal and by rail, and products leaving the facility would be transported by pipeline and rail.
- <sup>g</sup> Reflects operations (not construction) of the Project and Alternatives.
- <sup>h</sup> The amount of existing renewable fuels produced (12,000 bpd) is less than the existing renewable feeds processed (13,000 gpd) due to losses that occur during the production process.

The Executive Summary, Table ES-3 is revised as follows:

**Mitigation Measure AQ-1: Implement BAAQMD Basic Control Measures**

Construction contractors shall implement the following applicable BAAQMD basic control measures as BMPs:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material offsite shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least 2 times per day, not less than 4 hours apart, on San Pablo Avenue, between the refinery and I-80, and on the access roads between the Carbon Plant and Highway 4. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 2 minutes as recommended by the BAAQMD, and not to exceed 5 minutes as required by the California airborne toxics control measure CCR Title 13, Section 2485. Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications.
- All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Construction contractors shall implement the following Advanced Construction Mitigation Measures:

- All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
- Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.

- The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.
- Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.

Executive Summary, Table ES-3 is revised as follows:

**Recommended Onsite Emission Reduction Measures:**

- i. Onsite equipment and vehicle idling and/or daily operating hour curtailments;
- ii. Construction “clean fleet” using Tier 4 construction equipment to the maximum extent practicable;
- iii. Reductions in Vessel and/or Rail Traffic;
- iv. Other onsite NOx reduction measures (e.g., add-on NOx emission controls); or
- v. Avoid the use of Suezmax vessels to the maximum extent practicable.

Contra Costa County Department of Conservation and Development in its consideration of the NM Plan shall have the option to require daily NOx reductions at the Carbon Plant necessary to achieve the NOx daily emissions significance threshold. Daily idling of one kiln would provide sufficient NOx reductions to offset the Project’s incremental NOx emissions to below the NOx daily emissions threshold of significance on individual days that construction emissions are estimated to potentially be above the daily NOx significance threshold.

Executive Summary, Table ES-3 is revised as follows:

**Mitigation Measure BIO-3: Update and Review Facility Response Plan and Spill Prevention, Control, and Countermeasure Plan with OSPR**

- The Facility Response Plan and Spill Prevention, Control, and Countermeasure (SPCC) Plan shall be updated to address the Project operational changes, including changes in proposed feedstocks and types of vessels and trips ~~change in proposed feedstocks~~. The SPCC shall address the operational changes of the Transitional Phase and post-Project. Phillips 66 will consult with OSPR during update of the SPCC Plan, especially adequacy of booms at the Marine Terminal to quickly contain a spill of renewable feedstocks.

Executive Summary, Table ES-3 is revised as follows:

**Mitigation Measure HAZ-1: Implement Release, Monitoring and Avoidance Systems**

The following actions shall be completed by Phillips 66 prior to Project operations, including the transitional phase, and shall include routine inspection, testing and maintenance of all equipment and systems conducted in accordance with manufacturers’ recommendations and industry guidance for effective maintenance of critical equipment at the Marine Terminal.

Feedstocks handled at the Marine Terminal are not regulated under the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (LKS Act) (e.g. renewable feedstocks such as soybean oil and tallow) and therefore not subject to OSPR oversight, and are also not subject to the CSLC oversight efforts (MOTEMS, Article 5, Article 5.3 and Article 5.5, depending on the materials handled). Yet materials may be detrimental to the environment if spilled.



Regulated products (i.e. "Oil" and "Renewable Fuels" defined in Pub. Resources Code sec. 8750) will continue to be transferred at the Marine Terminal, which do require MOTEMS-compliant Terminal Operating Limits for those products that reside within the jurisdiction of the CSLC. To ensure that Project operation continues to meet those standards, the following measures are required.

#### **Applicability of MOTEMS, Article 5, 5.3, 5.5 and Spill Prevention Requirements**

As some materials transferred at the terminal may be feedstocks or other non-regulated materials/feedstocks/products, Phillips 66 shall comply with the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (LKS Act) for all vessels calling at the Marine Terminal regardless of feedstock/material type. In addition, MOTEMS operational regulations, as codified in Article 5. Marine Terminals Inspection and Monitoring (2CCR §2300 et seq), Article 5.3 Marine Terminals Personnel Training and Certification (2CCR §2540 et seq), and Article 5.5 Marine Terminals Oil Pipelines (2CCR §2560 et seq), including items such as static liquid pressure testing of pipelines, shall be implemented for all operations at the Marine Terminal regardless of feedstock/material type and LKS Act regulatory status.

Upon request, Phillips 66 shall provide evidence to relevant regulatory agencies that these facilities, operational response plans, and other applicable measures have been inspected and approved by CSLC and OSPR and determined to be in compliance.

If terminal operations do not allow for regular compliance and inspection of LKS and MOTEMS requirements by the CSLC and OSPR, Phillips 66 shall employ a CSLC-approved third-party to provide oversight as needed to ensure the same level of compliance as a petroleum-handling facility, and to ensure maximum protection of the environment from potential spills and resulting impacts. Phillips 66 shall provide evidence of compliance upon request of relevant regulatory agencies.

#### **Remote Release Systems**

The Marine Terminal has a remote release system that can be activated from a single control panel or at each quick-release mooring hook set. The central control system can be switched on in case of an emergency necessitating a single release of all mooring lines. However, to further minimize the potential for accident releases the following is required:

- Provide and maintain mooring line quick release devices that shall have the ability to be activated within 60 seconds.
- These devices shall be capable of being engaged by electric/push button release mechanism and by integrated remotely-operated release system.
- Document procedures and training for systems use and communications between Marine Terminal and vessel operator(s).
- Routine inspection, testing and maintenance of all equipment and systems in accordance with manufacturers' recommendations and necessity, as well as guidance provided by SIGTTO/OCIMF 2008 "Jetty Maintenance and Inspection Guide" Section 2.3.1.1, 2.3.1.2 and 2.3.1.4, are required to ensure safety and reliability. The inspections, testing, and maintenance will be performed by Phillips 66 or its designated representatives.
- In consultation with the CSLC and prior to Project operation, Phillips 66 shall provide a written evaluation of their existing equipment and provide recommendations for upgrading equipment to meet up-to-date best achievable technology standards and best industry

practices, including but not limited to consideration of equipment updates and operational effectiveness (e.g. visual and audible alarm options, data display location and functionality, optional system features). Phillips 66 shall follow guidance provided by SIGTTO/OCIMF 2008 “Jetty Maintenance and Inspection Guide” Section 2.3.1.1, 2.3.1.2 and 2.3.1.4.

Best achievable technology shall address:

- Functionality – Controlled release of the mooring lines (i.e. a single control system where each line can be remotely released individually in a controlled order and succession) vs. release all (i.e. a single control system where all lines are released simultaneously via a single push button). See SIGTTO/OCIMF 2008 “Jetty Maintenance and Inspection Guide” Section 2.3.1.2.1.
- Layout – The location(s) of the single control panel and/or central control system to validate that it is operationally manned such that the remote release systems can actually be activated within 60 seconds.

This measure would allow a vessel to leave the Marine Terminal as quickly as possible in the event of an emergency (fire, explosion, accident, or tsunami that could lead to a spill). In the event of a fire, tsunami, explosion, or other emergency, quick release of the mooring lines within 60 seconds would allow the vessel to quickly leave the Marine Terminal, which could help prevent damage to the Marine Terminal and vessel and avoid and/or minimize spills. This may also help isolate an emergency situation, such as a fire or explosion, from spreading between the Marine Terminal and vessel, thereby reducing spill potential. The above would only be performed in a situation where transfer connections were already removed and immediate release would not further endanger terminal, vessel and personnel.

### **Tension Monitoring Systems**

- Provide and maintain Tension Monitoring Systems to effectively monitor all mooring line and environmental loads, and avoid excessive tension or slack line conditions that could result in damage to the Marine Terminal structure and/or equipment and/or vessel mooring line failures.
- Line tensions and environmental data shall be integrated into systems that record and relay all critical data in real time to the control room, Marine Terminal operator(s) and vessel operator(s).
- All systems data shall be required to be recorded and readily accessible to enable tasks such as: (1) verification that systems are routinely operated in compliance with the MM (e.g. vessels are berthing within the MOTEMS compliant speed and angle requirements), and (2) post-event investigation and root-cause analysis (e.g. vessel allision during berthing).
- System shall include, but not be limited to, quick release hooks only (with load cells), site-specific current meter(s), site-specific anemometer(s), and visual and audible alarms that can support effective preset limits and shall be able to record and store monitoring data.
- Document procedures and training for systems use and communications between Marine Terminal and vessel operator(s).
- Routine inspection, testing and maintenance of all equipment and systems in accordance with manufacturers’ recommendations and necessity, as well as guidance provided by SIGTTO/OCIMF 2008 “Jetty Maintenance and Inspection Guide” Section 2.3.1.1, 2.3.1.2 and 2.3.1.4, are required to ensure safety and reliability. The

inspections, testing, and maintenance will be performed by Phillips 66 or its designated representatives.

- Install alternate technology that provides an equivalent level of protection.
- All systems data shall be required to be recorded and readily accessible to enable tasks such as: (1) verification that systems are routinely operated in compliance with the MM, and (2) post-event investigation and root-cause analysis.

The Marine Terminal is located in a high-velocity current area and currently has only limited devices to monitor mooring line strain and integrated environmental conditions. Updated MOTEMS Terminal Operating Limits (TOLs), including breasting and mooring, provide mooring requirements and operability limits that account for the conditions at the terminal. The upgrade to devices with monitoring capabilities can warn operators of the development of dangerous mooring situations, allowing time to take corrective action and minimize the potential for the parting of mooring lines, which can quickly escalate to the breaking of hose connections, the breakaway of a vessel, and/or other unsafe mooring conditions that could ultimately lead to a petroleum product spill. Backed up by an alarm system, real-time data monitoring and control room information would provide the Terminal Person-In-Charge with immediate knowledge of whether safe operating limits of the moorings are being exceeded. Mooring adjustments can be then made to reduce the risk of damage and accidental conditions.

#### **Allision Avoidance Systems**

- Provide and maintain Allision Avoidance Systems (AASs) at the Marine Terminal to prevent damage to the pier/wharf and/or vessel during docking and berthing operations. Integrate AASs with Tension Monitoring Systems such that all data collected are available in the Control Room and to Marine Terminal operator(s) at all times and vessel operator(s) during berthing operations. The AASs shall also be able to record and store monitoring data.
- All systems data shall be required to be recorded and readily accessible to enable tasks such as: (1) verification that systems are routinely operated in compliance with the MM, and (2) post-event investigation and root-cause analysis (e.g. vessel allision during berthing).
- Document procedures and training for systems use and communications between Marine Terminal and vessel operator(s).
- Routine inspection, testing and maintenance of all equipment and systems in accordance with manufacturers' recommendations and necessity, as well as guidance provided by SIGTTO/OCIMF 2008 "Jetty Maintenance and Inspection Guide", are required to ensure safety and reliability. The inspections, testing, and maintenance will be performed by Phillips 66 or its designated representatives.
- Velocity monitoring equipment is required to monitor reduced berthing velocities until permanent MOTEMS-compliant corrective actions are implemented.
- The systems shall also be utilized to monitor for vessel motion (i.e. surge and sway) during breasting/mooring operations to ensure excessive surge and sway are not incurred.

The Marine Terminal has a continuously manned marine interface operation monitoring all aspects of the marine interface. The Automatic Identification System is monitored through TerminalSmart and provides a record of vessel movements. Pursuant to the CSLC January 26, 2022 letter entitled Phillips 66 (P66) Rodeo Marine Terminal – Review of New September 2021

Mooring & Berthing Analyses and Terminal Operating Limits (TOLS), the single cone fenders shall not be used as the first point of contact during berthing operations. Therefore, all berthing operations shall utilize the double cone fenders. P66 shall incorporate TOL diagrams with landing point statements in the Terminal Information Booklet. For all vessels, a Phillips 66 Marine Advisor is in attendance and is in radio contact with the vessel master and pilot prior to berthing, reviewing initial contact point and then monitoring.

Excessive surge or sway of vessels (motion parallel or perpendicular to the wharf, respectively), and/or passing vessel forces may result in sudden shifts/redistribution of mooring forces through the mooring lines. This can quickly escalate to the failure of mooring lines, breaking of loading arm connections, the breakaway of a vessel, and/or other unsafe mooring conditions that could ultimately lead to a spill. Monitoring these factors will ensure that all vessels can safely berth at the Marine Terminal and comply with the standards required in the MOTEMS.

### **Changes to Chapter 1, Introduction**

The references in the Draft EIR are not contained in Chapter 8. All references follow each chapter and section. Chapter 1, Introduction, page 1-7 is revised as follows:

- Chapter 7, Report Preparation.
- Chapter 8, References.
- Appendices.

### **Changes to Chapter 3, Project Description**

Figures 3-1 and 3-2 are revised as follows:











Section 3.4.4 of the Draft EIR is revised as follows:

#### **3.4.4 Existing Pipeline Sites**

The Project includes the Pipeline Sites—four regional pipelines serving the Santa Maria Site and the Rodeo Refinery. The Santa Maria Site is connected to the Rodeo Refinery by approximately 200 miles of subterranean pipeline (Figure 3-5), designated Line 400 and Line 200. Line 400 runs north and east from the Santa Maria Site through the Coastal Range of central California in San Luis Obispo and Kern Counties, a region of dry grassland, pasture, and open live oak woodland, to connect with Line 200 north of McKittrick. Line 200 runs northwest up the west side of the San Joaquin Valley, through a mixture of Coastal Range grasslands and pasture and San Joaquin Valley agricultural land, and then west to the Rodeo Refinery. Line 200 runs through Kern, Kings, Fresno, Merced, Stanislaus, San Joaquin, Alameda, and Contra Costa Counties. ~~Two other pipelines—Line 100 and Line 300—connect the Santa Maria Site to crude oil collection facilities elsewhere in California (Figure 3-5). Line 100 runs underneath San Joaquin Valley agricultural land and Coastal Range grasslands and pasture lands in Kern County, and Line 300 runs beneath agricultural land and grasslands in the Santa Maria Valley area in San Luis Obispo and Santa Barbara Counties. Line 100 is used to transport crude oil from several collection facilities in Central California to Line 200 at the Junction Pump Station. Line 100 runs underneath San Joaquin Valley agricultural land and Coastal Range grasslands and pasture lands in Kern County (Figure 3-5). Line 300 connects crude oil collection facilities elsewhere in California to the Santa Maria Site and runs beneath agricultural land and grasslands in the Santa Maria Valley area in San Luis Obispo and Santa Barbara counties (Figure 3-5).~~

Section 3.4.2.5, page 3-20, paragraph 2 of the Draft EIR is revised as follows:

#### **3.4.2.5 Marine Oil Terminal Engineering and Maintenance**

The California State Lands Commission (CSLC) developed Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS) to establish standards for the design, construction, operation, and maintenance of marine oil terminals. ~~berthing and cargo loading/unloading facilities. MOTEMS are comprehensive and contain requirements for assessment of the structural, mechanical, and electrical systems, including, but not limited to routine audits and inspections, geotechnical assessments, structural evaluations, seismic analyses, berthing and mooring analyses, fire protection, pipelines, mechanical and electrical equipment, and electrical systems.~~ MOTEMS is intended to minimize the possibility of accidents at marine oil terminals during potentially damage causing events such as seismic activity, extreme weather events, tsunamis, vessel impacts, fires, and explosions ~~extreme weather events and seismic activity~~ that would lead to releases of petroleum substances to the environment. Compliance with MOTEMS is ongoing, as facilities are required to have routine audits and inspections to identify any deficiencies. Existing facilities are required to retrofit or rebuild as necessary to meet MOTEMS. ~~which has been completed at~~ The Rodeo Refinery's Marine Terminal, and Phillips 66 will continue to work with the CSLC Marine Environmental Protection Division (MEPD) to take any necessary corrective actions to comply with MOTEMS requirements. The CSLC has regulatory authority over MOTEMS.

Chapter 3 Table 3-2 is revised as follows:

**Table 3-2. Rodeo Refinery Pre- and Post-Project Operational Activity**

	Baseline	Post-Project
<b>Product Material Received</b>		
Marine Terminal Crude and Gas Oil Received (1,000 bpd 12-month average)	35	0
Pipeline Crude Received (1,000 bpd 12-month average)	70	0
Renewable Feedstocks Received (1,000 bpd 12-month average) <sup>a</sup>	0	80
Gasoline and Blendstocks Received (1,000 bpd 12-month average)	10	38
<b>Product Shipped</b>		
Petroleum Products Shipped (1,000 bpd 12-month average)	121	40
Renewable Fuels Shipped (1,000 bpd 12-month average)	0	67
Treated Renewable Feedstock Shipped (1,000 bpd 12-month average)	0	25
<b>Mode of Transportation</b>		
Tanker Vessels (calls/year)	80	201
Barges (calls/year)	90	161
Carbon Plant Site Rail (average railcars per week)	6.96	0
Refinery Railcar Loading/Unloading Rack (average railcars per day)	4.7	16
Santa Maria Site Rail (railcars per year)	409	0
Refinery and Carbon Plant Truck Trips (roundtrips per year)	40,213	16,026
Santa Maria Site Truck Trips (roundtrips per year)	13,008	0
Rodeo Refinery Approximate Number of Employees and Contractors	650	650

The title for Figure 3-7 is not accurate. Figure 3-7 is revised as follows:

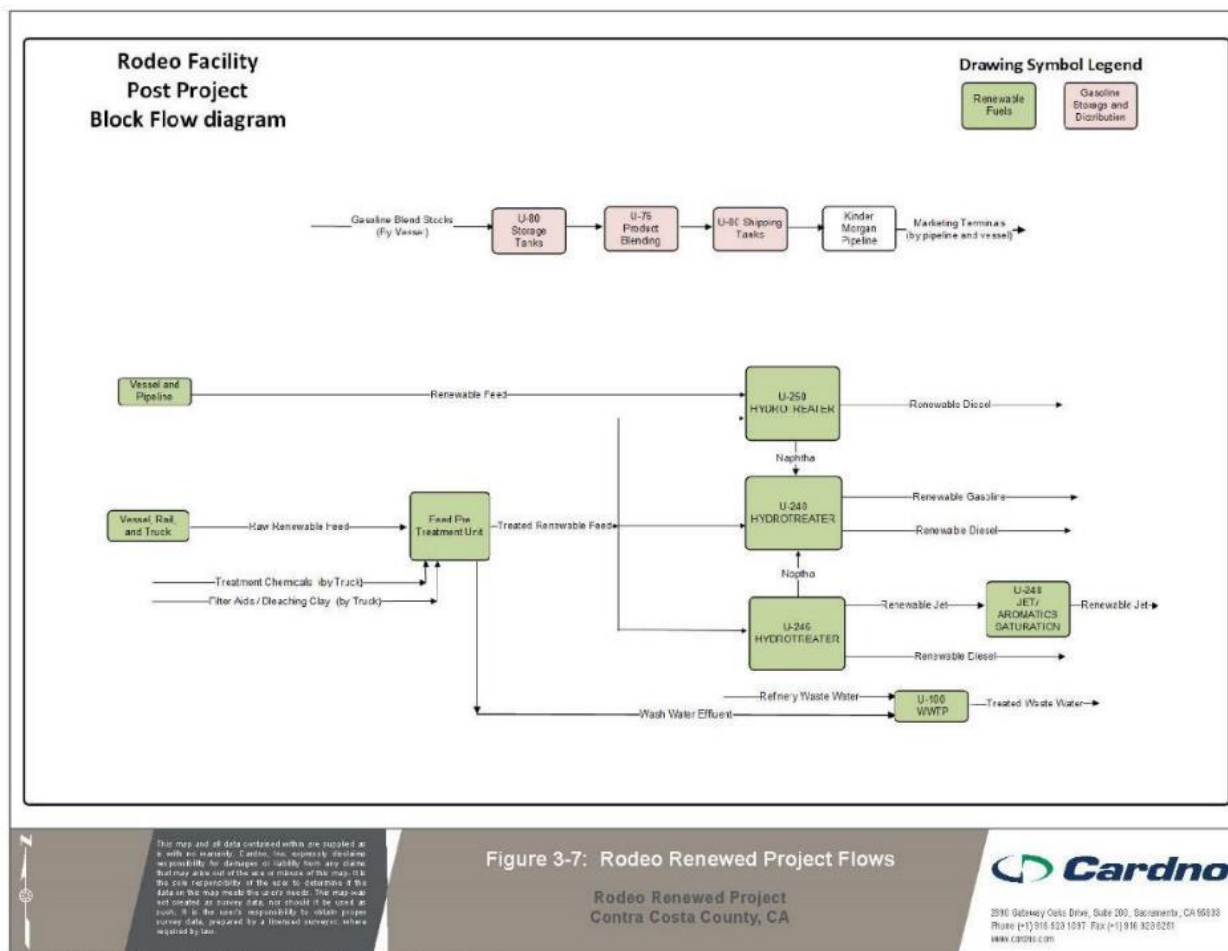


Figure 3-7. ~~Rodeo Renewed Project Flows~~ Post Project Flows

Section 3.7.1 of the Project Description is revised as follows:

### 3.7.1 Product Received

Once the Project is operational, no crude oil would be processed at the Rodeo Refinery. As shown in Table 3-2, the Rodeo Refinery would no longer receive crude oil and gas oil at its Marine Terminal (35,000 bpd on a 12-month rolling average<sup>10</sup>) or from pipelines connecting the Rodeo Refinery to Central California crude supplies and the Santa Maria Refinery (70,000 bpd). The Rodeo Refinery would receive 38,000 bpd gasoline and gasoline blendstocks, which is an increase over baseline of 28,000 bpd.

Section 3.8.3.5 is revised as follows:

### 3.8.3.5 *Project Feedstock Flexibility*

~~To address these and other inherent risk factors in the market, Phillips 66 secures contracts in excess of the crude oil feedstocks supply needed to process more than 2 million barrels of crude oil per day. Phillips 66's position in the market is then adjusted as needed over time, depending on the market conditions for that year or month (or appropriate time interval).~~

Phillips 66 could secure market positions in oilseeds, vegetable oils, and waste oils, and by having an excess of the amounts needed for processing, Phillips 66 has the flexibility to adapt to market

conditions and process the optimal mix of renewable feedstocks to achieve its business objectives. Thus, it is difficult to predict which specific types or sources of renewable feedstocks would be used in any one particular year, much less over several years...

### **Changes to Section 4.3, Air Quality**

Section 4.3.4.2 of the Draft EIR are revised as follows:

#### **4.3.4.2 CEQA Baseline Emissions**

Vessel emissions of criteria pollutants include hoteling at the wharf or at anchor, and vessel maneuvering and transit between the wharf or anchorage area out to the Pilot Buoy located ~~approximately 9 nautical miles (7.8 statute miles)~~ 11 nautical miles west of the Golden Gate.

Air Quality, Mitigation Measure AQ-1 is revised as follows:

#### **Mitigation Measure AQ-1: Implement BAAQMD Basic Control Measures**

Construction contractors shall implement the following applicable BAAQMD basic control measures as BMPs:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material offsite shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least 2 times per day, not less than 4 hours apart, on San Pablo Avenue, between the refinery and I-80, and on the access roads between the Carbon Plant and Highway 4. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 2 minutes as recommended by the BAAQMD, and not to exceed 5 minutes as required by the California airborne toxics control measure CCR Title 13, Section 2485. Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications.
- All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Construction contractors shall implement the following Advanced Construction Mitigation Measures:

- All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
- Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.
- Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.

Air Quality Mitigation Measure AQ-2: Implement a NOx Mitigation Plan, is revised as follows:

**Recommended Onsite Emission Reduction Measures:**

- i. Onsite equipment and vehicle idling and/or daily operating hour curtailments;
- ii. Construction “clean fleet” using Tier 4 construction equipment to the maximum extent practicable;
- iii. Reductions in Vessel and/or Rail Traffic;
- iv. Other onsite NOx reduction measures (e.g., add-on NOx emission controls); or
- v. Avoid the use of Suezmax vessels to the maximum extent practicable.

Contra Costa County Department of Conservation and Development in its consideration of the NM Plan shall have the option to require daily NOx reductions at the Carbon Plant necessary to achieve the NOx daily emissions significance threshold. Daily idling of one kiln would provide sufficient NOx reductions to offset the Project's incremental NOx emissions to below the NOx daily emissions threshold of significance on individual days that construction emissions are estimated to potentially be above the daily NOx significance threshold.

Section 4.3, Air Quality Mitigation Measure AQ-4 is revised as follows:

**Mitigation Measure AQ-4: Implement Odor Management Plan**

~~During the 2-year construction phase of the Project, an Odor Management Plan (OMP) shall be developed and implemented upon commencement of the renewable fuels processes, which will become an integrated part of daily operations at the Rodeo Refinery. The purpose of the OMP is to prevent any offsite odors and effect diligent identification and remediation of any potential odors generated by the Project. The OMP shall outline equipment that is in place and procedures~~

~~that facility personnel shall use to address odor issues, facility wide. The OMP would include evaluation of the overall system performance, identifying any trends to provide an opportunity for improvements to the plan, and updating the odor management and control strategies, as necessary. This plan would be retained at the facility for County or other government agency inspection upon request.~~

Phillips 66 shall develop and implement an Odor Management Plan (OMP). The OMP shall be an integrated part of daily operations at the Rodeo Site, to effect diligent identification and remediation of any potential odors generated by the Facility.

- The OMP shall be developed and reviewed by the County and the BAAQMD prior to operation of the Project, and implemented upon commencement of the renewable fuels processes.
- The OMP shall be an “evergreen” document that provides continuous evaluation of the overall system performance, identifying any trends to provide an opportunity for improvements to the plan, and updating the odor management and control strategies as necessary.
- The OMP shall include guidance for the proactive identification and documentation of odors through routine employee observations, routine operational inspections, and odor compliant investigations.
- All odor complaints received by the facility shall be investigated as soon as is practical within the confines of proper safety protocols and site logistics. The goal of the investigation will be to determine if an odor originates from the facility and, if so, to determine the specific source and cause of the odor, and then to remediate the odor.
- The OMP shall be retained at the facility for Contra Costa County, the BAAQMD, or other government agency inspection upon request.

## **Changes to Section 4.4, Biological Resources**

Section 4.4.3.2, page 4.4-109 is revised as follows:

### **Coastal Ecosystems Protection Act of 2006, California State Lands Act**

The Coastal Ecosystems Protection Act of 2006 directed the CSLC to adopt performance standards for discharging ballast water by January 1, 2008, and prepare a report assessing the availability of treatment technologies to meet those standards (Falkner et al. 2009). The CSLC completed the rulemaking process and adopted the standards in October 2007 as part of its Marine Invasive Species Program (MISP), ~~as described below (a multi-agency program that includes CDFW's OSPR, the SWRCB, and the Department of Tax and Fee Administration).~~ The technology assessment report was completed in December 2007. In response to the report's recommendations, the California Legislature passed Senate Bill 1781 (Chapter 696, Statutes of 2008), which delayed initial implementation of the performance standards from January 1, 2009, to January 1, 2010, and required an update of the technology assessment report by January 1, 2009. The CSLC continues to support research into evolving ballast water management practices, treatment technologies, compliance monitoring techniques and equipment, and environmental effects of ballast water treatment. According to CSLC (2021), in 2018–2019, less than 1 percent of reported ballast water discharged in California did not meet the state's ballast water management requirements.

The CSLC is also mandated to adopt regulations governing the management of vessel fouling by January 1, 2012, specifically, introduction of nonindigenous invasive species via vectors other than ballast water. Two studies are currently underway to guide the development of these regulations. In January 2008, Hull Husbandry Reporting Forms were used to gather data on fouling-related husbandry practices of the commercial vessel fleet visiting California waters. In addition, ongoing fouling-related research conducted by the CSLC's ~~Marine Invasive Species Program~~ MISP will better



define how hull husbandry practices and voyage characteristics affect the quantity and quality of fouling biota associated with vessels separating in California (CSLC 2021).

Section 4.4.3.2, page 4.4-109, following paragraph titled "California Marine Invasive Species Act" is revised as follows:

### **Marine Invasive Species Program**

MISP was reauthorized and expanded in 2003 with the passage of the Marine Invasive Species Act (MISA; AB 433, Chapter 491, Statutes of 2003) which, among other provisions, directed the Commission to adopt ballast water management regulations for vessels moving coastally between ports on the west coast of the U.S. Since 2003, the MISA has been amended numerous times, most notably to establish California's ballast water discharge performance standards (SB 497, Chapter 292, Statutes of 2006) and to authorize the Commission to adopt and implement biofouling management regulations (AB 740, Chapter 370, Statutes of 2007).

The Commission adopts and amends regulations to implement the MISA (Public Resources Code section 71201.7). The ballast water management regulations for coastal vessels were adopted in 2006 (California Code of Regulations, title 2, section 2280 et seq.); ballast water discharge performance standards were codified in 2007 (California Code of Regulations, title 2, section 2291 et seq.); and the biofouling management regulations (see section 7.1) were adopted and implemented in 2017 (California Code of Regulations, title 2, section 2298.1 et seq.). These regulations were strengthened through the adoption of enforcement regulations in 2017 (California Code Regulations, title 2, section 2299.01 et seq.).

In 2019, the Commission sponsored AB 912 (Chapter 433, Statutes of 2019) which authorizes the Commission to:

- Adopt and enforce the federal ballast water discharge performance standards set forth in section 151.2030(a) of Title 33 of the Code of Federal Regulations; and
- Delay implementation of the interim and final California ballast water discharge performance standards to 2030 and 2040, respectively, due to a lack of available ballast water treatment technologies to enable vessels to meet the California standards.

In 2021, the Commission amended existing regulations (California Code of Regulations, title 2, section 2291 et seq.) to implement the requirements of AB 912.

Section 4.4.3.3, page 4.4-111, after paragraph 1 is revised as follows:

The following policies are relevant to the Project:

#### Fish, Other Aquatic Organisms and Wildlife

Policy 4: Consult with the California Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, whenever a proposed project may adversely affect an endangered or threatened plant, fish, other aquatic organism or wildlife species;

Not authorize projects that would result in the "taking" of any plant, fish, other aquatic organism or wildlife species listed as endangered or threatened pursuant to the state or federal Endangered Species Acts, or the federal Marine Mammal Protection Act, or species that are candidates for listing under these acts, unless the project applicant has obtained the appropriate "take" authorization from the U.S. Fish and Wildlife Service, National Marine Fisheries Service or the California Department of Fish and Wildlife; and

Give appropriate consideration to the recommendations of the California Department of Fish and Wildlife, the National Marine Fisheries Service or the U.S. Fish and Wildlife Service in order to avoid possible adverse effects of a proposed project on fish, other aquatic organisms and wildlife habitat.

Section 4.4.9 Impact 4.4-4, page 4.4-140 is revised as follows:

**Mitigation Measure BIO-3: Update and Review Facility Response Plan and Spill Prevention, Control, and Countermeasure Plan with OSPR**

- The Facility Response Plan and Spill Prevention, Control, and Countermeasure (SPCC) Plan shall be updated to address the Project operational changes, including changes in proposed feedstocks and types of vessels and trips. ~~change in proposed feedstocks.~~ The SPCC shall address the operational changes of the Transitional Phase and post-Project. Phillips 66 will consult with OSPR during update of the SPCC Plan, especially adequacy of booms at the Marine Terminal to quickly contain a spill of renewable feedstocks.

Impact 4.4-6 page 4.4-143 is revised as follows:

- As discussed under Impact 4.4-3 ~~4.4-5~~, deep-draft vessel propeller-induced water velocities, and resulting shear velocities, would be expected to scour sediment and resuspend sediments, causing turbidity plumes. Turbidity would be expected to be more pronounced during docking maneuvers and departures.

**Changes to Section 4.5, Cultural Resources**

Section 4.5.2.3, page 4.5-186 – 187 of the Draft EIR is revised as follows:

***California Public Resources Code***

In addition to the definition of “unique archaeological resources” in PRC Section 21083.2, the sections of the California Public Resource Code applicable to the Project follow:

- PRC Title 14, Section 5097.5: any unauthorized removal or destruction of archaeological, paleontological resources on sites located on public lands is a misdemeanor.
- PRC Title 14, Section 5097.99: prohibits obtaining or possessing Native American artifacts or human remains taken from a grave or cairn; sets penalties.
- PRC Section 6313: the title to all abandoned shipwrecks and all archaeological sites and historic resources on or in the tide and submerged lands of California is vested in the state and subject to the control of the commission.

Section 4.5.7, page 4.5-191 of the Draft EIR is revised as follows:

**Mitigation Measure CUL-1: Inadvertent Discovery of Archaeological Resources**

Pursuant to CEQA Guidelines Section 15064.5(f), “provisions for historical or unique archaeological resources accidentally discovered during construction” shall be instituted. In the event that any cultural resources are discovered during ground-disturbing activities, all work within 100 feet of the find shall be halted and Phillips 66 shall consult with the County and a qualified archaeologist (as approved by the County) to assess the significance of the find pursuant to CEQA Guidelines Section 15064.5. If cultural resources are recovered on State lands, submerged or tidal lands, all work within 100 feet of the find shall be halted and Phillips 66 shall consult with the California State Lands Commission. If any find is determined to be significant, representatives of the County and the qualified archaeologist would meet to determine the appropriate course of action.

**Changes to Section 4.7, Geology and Soils**

Section 4.7.2.7 page 4.7-227 is revised as follows:

The earthquake design requirements take into account the occupancy category of the structure, site class, soil classifications, and various seismic coefficients, CBC Chapter 16, Section 1613, provides

earthquake loading specifications for every structure, and portion thereof, including nonstructural components that are permanently attached to structures and their supports and attachments, which shall be designed and constructed to resist the effects of earthquake motions in accordance with ~~ASCE 7-05~~ ASCE/SEI 7-22.

Section 4.7.2.7 page 4.7-228

CBC Chapter 31F, administered by the Marine Environmental Protection Division on behalf of the CSLC contains requirements and specifications pertaining to Marine Terminal Structures; existing, new and modified. Nonstructural and nonbuilding components of marine terminals are included as well and required to comply with all regulations. Chapter 31F provides earthquake loading and geotechnical specifications.

### **Changes to Section 4.8, Greenhouse Gas Emissions**

Section 4.8.2.3 is revised as follows:

#### ***4.8.2.3 Project Setting***

Vessel emissions include hoteling at the wharf or at anchor, and vessel maneuvering and transit between the wharf or anchorage area out to the Pilot Buoy located ~~approximately 9~~ 11 nautical miles (~~10.4 statute miles~~) west of the Golden Gate.

### **Changes to Section 4.9, Hazards and Hazardous Materials**

Section 4.9.2.4, page 4-9.300 is revised as follows:

#### **Design**

As industrial facilities that handle hazardous chemicals, the Rodeo and Santa Maria Refineries must be constructed and operated in accordance with certain codes and standards that are enforced via administrative mechanisms such as internal audits, design reviews, and building inspections. Some of the main design standards include the American Petroleum Institute's (API's) Recommended Practice 750, Codes of Management Practices of the Chemical Manufacturers, the American National Standards Institute's B31.1: Power Piping and B13.3: Petroleum Refinery Piping, National Fire Prevention Association 30, and the International Building Code. ~~Uniform Building Codes~~.

Section 4.9.2.7, page 4.9-301, is revised as follows:

#### ***4.9.2.7 Marine Oil Terminal Engineering and Maintenance Standards***

~~The Marine Terminal operates as a MOTEMS-compliant facility, is required to and has ongoing compliance with MOTEMS, meaning that its construction, materials, equipment, maintenance, and operating procedures meet the standards for marine terminals established by CSLC. The Marine Terminal undergoes routine audits and inspections to identify any deficiencies and comply with MOTEMS.~~ The operating procedures are set forth in the Phillips 66 Rodeo Marine Terminal Handbook, which was revised and updated in 2016.

Section 4.9.2.11, page 4.9-313, paragraph 5 is revised as follows:

As per California Building Code Chapter 31F – Marine Oil Terminals, Section 3101F.2, the purpose of the code is to establish minimum engineering, inspection and maintenance criteria for Marine Oil Terminals in order to prevent oil spills and to protect public health, safety and the environment. The code defines “oil” as any kind of petroleum, liquid hydrocarbons, or petroleum products or any fraction or residues thereof, including but not limited to, crude oil, bunker fuel, gasoline, diesel fuel, aviation fuel, oil sludge, oil refuse, oil mixed with waste, and liquid distillates from unprocessed natural gas.

The discussion under Impact 4.9-2, page 4.9.329, paragraph 2 is revised as follows:

During the transitional phase, additional vessel traffic arriving at the Marine Terminal would increase from 80 tankers and 90 barges annually as part of the baseline, or about 3.3 vessels calls per week, to an estimated 96 tankers and 92 barges over the 7-month transitional period, or about 6.7 calls per week, with a total number of vessel calls over the transitional period producing an increase of ~~approximately 10 percent~~ 11 percent over the baseline entire-year vessel calls. This would produce a spill frequency of an in-transit spill of once every 1,076 years and a spill at the Marine Terminal of about once every year (note this is on an annualized basis utilizing the rate of vessel calls over the 7-month period).

The discussion under Impact 4.9-2, page 4.9-330 is revised as follows:

...Appendix C-2, ~~CEQA PM2.5 Modeling Analysis~~ Rodeo Renewed Spill Modeling Report.

Mitigation Measure HAZ-1, beginning page 4.9-334, is revised as follows:

The following measures are consistent with requirements applied to other marine terminals in the San Francisco Bay (CSLC 2014, 2015) subject to discretionary permitting as a result of modified operations.

**Mitigation Measure HAZ-1: Implement Release, Monitoring and Avoidance Systems**

The following actions shall be completed by Phillips 66 prior to Project operations, including the transitional phase, and shall include routine inspection, testing and maintenance of all equipment and systems conducted in accordance with manufacturers' recommendations and industry guidance for effective maintenance of critical equipment at the Marine Terminal.

Feedstocks handled at the Marine Terminal are not regulated under the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (LKS Act) (e.g. renewable feedstocks such as soybean oil and tallow) and therefore not subject to OSPR oversight, and are also not subject to the CSLC oversight efforts (MOTEMS, Article 5, Article 5.3 and Article 5.5, depending on the materials handled). Yet materials may be detrimental to the environment if spilled.

Regulated products (i.e. "Oil" and "Renewable Fuels" defined in Pub. Resources Code sec. 8750) will continue to be transferred at the Marine Terminal, which do require MOTEMS-compliant Terminal Operating Limits for those products that reside within the jurisdiction of the CSLC. To ensure that Project operation continues to meet those standards, the following measures are required.

**Applicability of MOTEMS, Article 5, 5.3, 5.5 and Spill Prevention Requirements**

As some materials transferred at the terminal may be feedstocks or other non-regulated materials/feedstocks/products, Phillips 66 shall comply with the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (LKS Act) for all vessels calling at the Marine Terminal regardless of feedstock/material type. In addition, MOTEMS operational regulations, as codified in Article 5, Marine Terminals Inspection and Monitoring (2CCR §2300 et seq), Article 5.3 Marine Terminals Personnel Training and Certification (2CCR §2540 et seq), and Article 5.5 Marine Terminals Oil Pipelines (2CCR §2560 et seq), including items such as static liquid pressure testing of pipelines, shall be implemented for all operations at the Marine Terminal regardless of feedstock/material type and LKS Act regulatory status.

Upon request, Phillips 66 shall provide evidence to relevant regulatory agencies that these facilities, operational response plans, and other applicable measures have been inspected and approved by CSLC and OSPR and determined to be in compliance.

If terminal operations do not allow for regular compliance and inspection of LKS and MOTEMS requirements by the CSLC and OSPR, Phillips 66 shall employ a CSLC-approved third-party to

provide oversight as needed to ensure the same level of compliance as a petroleum-handling facility, and to ensure maximum protection of the environment from potential spills and resulting impacts. Phillips 66 shall provide evidence of compliance upon request of relevant regulatory agencies.

### **Remote Release Systems**

The Marine Terminal has a remote release system that can be activated from a single control panel or at each quick-release mooring hook set. The central control system can be switched on in case of an emergency necessitating a single release of all mooring lines. However, to further minimize the potential for accident releases the following is required:

- Provide and maintain mooring line quick release devices that shall have the ability to be activated within 60 seconds.
- These devices shall be capable of being engaged by electric/push button release mechanism and by integrated remotely-operated release system.
- Document procedures and training for systems use and communications between Marine Terminal and vessel operator(s).
- Routine inspection, testing and maintenance of all equipment and systems in accordance with manufacturers' recommendations and necessity, as well as guidance provided by SIGTTO/OCIMF 2008 "Jetty Maintenance and Inspection Guide" Section 2.3.1.1, 2.3.1.2 and 2.3.1.4, are required to ensure safety and reliability. The inspections, testing, and maintenance will be performed by Phillips 66 or its designated representatives.
- In consultation with the CSLC and prior to Project operation, Phillips 66 shall provide a written evaluation of their existing equipment and provide recommendations for upgrading equipment to meet up-to-date best achievable technology standards and best industry practices, including but not limited to consideration of equipment updates and operational effectiveness (e.g. visual and audible alarm options, data display location and functionality, optional system features). Phillips 66 shall follow guidance provided by SIGTTO/OCIMF 2008 "Jetty Maintenance and Inspection Guide" Section 2.3.1.1, 2.3.1.2 and 2.3.1.4.

Best achievable technology shall address:

- Functionality – Controlled release of the mooring lines (i.e. a single control system where each line can be remotely released individually in a controlled order and succession) vs. release all (i.e. a single control system where all lines are released simultaneously via a single push button). See SIGTTO/OCIMF 2008 "Jetty Maintenance and Inspection Guide" Section 2.3.1.2.1.
- Layout – The location(s) of the single control panel and/or central control system to validate that it is operationally manned such that the remote release systems can actually be activated within 60 seconds.

This measure would allow a vessel to leave the Marine Terminal as quickly as possible in the event of an emergency (fire, explosion, accident, or tsunami that could lead to a spill). In the event of a fire, tsunami, explosion, or other emergency, quick release of the mooring lines within 60 seconds would allow the vessel to quickly leave the Marine Terminal, which could help prevent damage to the Marine Terminal and vessel and avoid and/or minimize spills. This may also help isolate an emergency situation, such as a fire or explosion, from spreading between the Marine Terminal and vessel, thereby reducing spill potential. The above would only be performed in a

situation where transfer connections were already removed and immediate release would not further endanger terminal, vessel and personnel.

### **Tension Monitoring Systems**

- Provide and maintain Tension Monitoring Systems to effectively monitor all mooring line and environmental loads, and avoid excessive tension or slack line conditions that could result in damage to the Marine Terminal structure and/or equipment and/or vessel mooring line failures.
- Line tensions and environmental data shall be integrated into systems that record and relay all critical data in real time to the control room, Marine Terminal operator(s) and vessel operator(s).
- All systems data shall be required to be recorded and readily accessible to enable tasks such as: (1) verification that systems are routinely operated in compliance with the MM (e.g. vessels are berthing within the MOTEMS compliant speed and angle requirements), and (2) post-event investigation and root-cause analysis (e.g. vessel allision during berthing).
- System shall include, but not be limited to, quick release hooks only (with load cells), site-specific current meter(s), site-specific anemometer(s), and visual and audible alarms that can support effective preset limits and shall be able to record and store monitoring data.
- Document procedures and training for systems use and communications between Marine Terminal and vessel operator(s).
- Routine inspection, testing and maintenance of all equipment and systems in accordance with manufacturers' recommendations and necessity, as well as guidance provided by SIGTTO/OCIMF 2008 "Jetty Maintenance and Inspection Guide" Section 2.3.1.1, 2.3.1.2 and 2.3.1.4, are required to ensure safety and reliability. The inspections, testing, and maintenance will be performed by Phillips 66 or its designated representatives.
- Install alternate technology that provides an equivalent level of protection.
- All systems data shall be required to be recorded and readily accessible to enable tasks such as: (1) verification that systems are routinely operated in compliance with the MM, and (2) post-event investigation and root-cause analysis.

The Marine Terminal is located in a high-velocity current area and currently has only limited devices to monitor mooring line strain and integrated environmental conditions. Updated MOTEMS Terminal Operating Limits (TOLs), including breasting and mooring, provide mooring requirements and operability limits that account for the conditions at the terminal. The upgrade to devices with monitoring capabilities can warn operators of the development of dangerous mooring situations, allowing time to take corrective action and minimize the potential for the parting of mooring lines, which can quickly escalate to the breaking of hose connections, the breakaway of a vessel, and/or other unsafe mooring conditions that could ultimately lead to a petroleum product spill. Backed up by an alarm system, real-time data monitoring and control room information would provide the Terminal Person-In-Charge with immediate knowledge of whether safe operating limits of the moorings are being exceeded. Mooring adjustments can be then made to reduce the risk of damage and accidental conditions.



### **Allision Avoidance Systems**

- Provide and maintain Allision Avoidance Systems (AASs) at the Marine Terminal to prevent damage to the pier/wharf and/or vessel during docking and berthing operations. Integrate AASs with Tension Monitoring Systems such that all data collected are available in the Control Room and to Marine Terminal operator(s) at all times and vessel operator(s) during berthing operations. The AASs shall also be able to record and store monitoring data.
- All systems data shall be required to be recorded and readily accessible to enable tasks such as: (1) verification that systems are routinely operated in compliance with the MM, and (2) post-event investigation and root-cause analysis (e.g. vessel allision during berthing).
- Document procedures and training for systems use and communications between Marine Terminal and vessel operator(s).
- Routine inspection, testing and maintenance of all equipment and systems in accordance with manufacturers' recommendations and necessity, as well as guidance provided by SIGTTO/OCIMF 2008 "Jetty Maintenance and Inspection Guide", are required to ensure safety and reliability. The inspections, testing, and maintenance will be performed by Phillips 66 or its designated representatives.
- Velocity monitoring equipment is required to monitor reduced berthing velocities until permanent MOTEMS-compliant corrective actions are implemented.
- The systems shall also be utilized to monitor for vessel motion (i.e. surge and sway) during breasting/mooring operations to ensure excessive surge and sway are not incurred.

The Marine Terminal has a continuously manned marine interface operation monitoring all aspects of the marine interface. The Automatic Identification System is monitored through TerminalSmart and provides a record of vessel movements. Pursuant to the CSLC January 26, 2022 letter entitled Phillips 66 (P66) Rodeo Marine Terminal – Review of New September 2021 Mooring & Berthing Analyses and Terminal Operating Limits (TOLS), the single cone fenders shall not be used as the first point of contact during berthing operations. Therefore, all berthing operations shall utilize the double cone fenders. P66 shall incorporate TOL diagrams with landing point statements in the Terminal Information Booklet. For all vessels, a Phillips 66 Marine Advisor is in attendance and is in radio contact with the vessel master and pilot prior to berthing, reviewing initial contact point and then monitoring.

Excessive surge or sway of vessels (motion parallel or perpendicular to the wharf, respectively), and/or passing vessel forces may result in sudden shifts/redistribution of mooring forces through the mooring lines. This can quickly escalate to the failure of mooring lines, breaking of loading arm connections, the breakaway of a vessel, and/or other unsafe mooring conditions that could ultimately lead to a spill. Monitoring these factors will ensure that all vessels can safely berth at the Marine Terminal and comply with the standards required in the MOTEMS.

### **Changes to Section 4.10, Hydrology and Water Quality**

Section 4.10.2.11, page 4.10-354, paragraph 6 of the Draft EIR is revised as follows:

In addition, marine terminals located on lands under CSLC jurisdiction are subject to comply with the CSLC's Marine Facilities Division–developed MOTEMS. ~~For the existing Marine Terminal, these regulations establish standards for the maintenance of marine oil terminal berthing and cargo loading/unloading facilities. MOTEMS are intended to minimize the possibility of accidents at marine~~

~~oil terminals during extreme weather events and seismic activity that would lead to releases of petroleum and oil-based substances to the environment. Existing facilities are required to retrofit or rebuild as necessary to meet MOTEMS, which the Rodeo Refinery's Marine Terminal has, and Phillips 66 would continue to comply.~~

Impact 4.10-1, page 4.10- 363 is revised as follows:

#### **Rodeo Refinery—Marine Terminal (spills)**

During the 7-month transitional phase that would be concurrent with Rodeo Refinery construction, vessel traffic arriving at the Marine Terminal would increase from 80 tankers and 90 barges to an estimated 96 tankers and 92 barges, which is an increase of ~~approximately 10 percent~~ **11 percent** over baseline conditions. Marine vessels would bring renewable feedstocks and gasoline-blending components. In the event of an accidental spill hazardous materials would discharge into waters of the San Pablo and San Francisco Bays.

### **Changes to Section 4.14, Tribal Cultural Resources**

Section 4.14.2.3, page 4.14-425, is revised as follows:

#### ***California Public Resources Code***

In addition to the definition of “unique archaeological resources” in PRC Section 21083.2, the sections of the California Public Resource Code applicable to the Project follow:

- PRC Title 14, Section 5097.5: any unauthorized removal or destruction of archaeological, paleontological resources on sites located on public lands is a misdemeanor.
- PRC Title 14, Section 5097.99: prohibits obtaining or possessing Native American artifacts or human remains taken from a grave or cairn; sets penalties.
- PRC Section 6313: the title to all abandoned shipwrecks and all archaeological sites and historic resources on or in the tide and submerged lands of California is vested in the state and subject to the control of the commission.

Mitigation Measure TCR-3, page 4.14-430 is revised as follows:

#### **Mitigation Measure TCR-3: Inadvertent Discoveries**

- Phillips 66 shall develop a standard operating procedure, or ensure any existing procedure, to include points of contact, timeline and schedule for the project so all possible damages can be avoided or alternatives and cumulative impacts properly accessed.
- If potential tribal cultural resources, archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other Project personnel during construction activities, work will cease in the immediate vicinity of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from an interested Native American Tribe is present. A qualified cultural resources specialist and Native American Representatives and Monitors from culturally affiliated Native American Tribes will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. These recommendations will be documented in the project record. For any recommendations made by interested Native American Tribes which are not implemented, a justification for why the recommendation was not followed will be provided in the project record.
- If cultural resources are recovered on State lands, submerged or tidal lands, all work within 100 feet of the find shall be halted and Phillips 66 shall consult with the California State Lands Commission.

## Changes to Chapter 5, Alternatives Analysis

Chapter 5 Alternatives Analysis, Table 5-1 is revised as follows:

**Table 5-1. Summary of Alternatives**

	Project	No Project <sup>a</sup>	Reduced Project	Terminal Only <sup>c</sup>	No Temporary Increase in Crude Oil <sup>b</sup>
<b><u>Product Material Received/</u> Processed (bpd)</b>					
<u>Crude and Gas Oil Received</u>	<u>0</u>	<u>105,000<sup>e</sup></u>	<u>0</u>	<u>0</u>	<u>0</u>
Renewable Feedstock Received/Processed	80,000 <sup>c</sup>	0	55,000	<del>0</del> <del>0</del> <u>75,000<sup>f</sup></u>	80,000 <sup>c</sup>
Gasoline Blendstocks Received/Processed	38,000	<del>445,000</del> <u>10,000</u>	38,000		38,000
Existing Renewable Fuels Processed	13,000	13,000 <sup>d,h</sup>	13,000		13,000
<b>Product Produced (bpd)</b>					
Renewable Fuels Produced/Shipped	55,000 <sup>c</sup>	0	50,000	75,000 <sup>f</sup>	55,000 <sup>c</sup>
Existing Renewable Fuels Produced	12,000	12,000 <sup>d,h</sup>	12,000		12,000
<del>Conventional Fuels</del> <u>Petroleum Products Produced/Shipped</u>	40,000	<del>400</del> <u>109,000</u>	40,000		40,000
<u>Treated Renewable Feedstock Shipped</u>	<u>25,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	
<b>Mode of Transportation<sup>g</sup></b>					
Ships (annual visits)	201	80	165	70	201
Barges (annual visits)	161	90	161	40	161
Truck Trips (roundtrips/year)	16,026	53,221	11,230	0	16,026
Railcars (per day)	16	5	16	8	16
Employees	650	650	630	75	650

Notes:

- No Project and Terminal Only Alternatives would transport blend stock and product by pipeline, marine vessel, and rail.
- The No Temporary Increase in Crude Oil Alternative at full buildout is identical to the Project; it differs only in the temporary change in throughput of crude oil during the construction period, and associated vessel calls, which is not reflected in this table. This difference, however, is described in the following discussion.
- Up to 25,000 bpd excess capacity of pre-treated feedstocks could be sold elsewhere.
- As explained in the Project Description, Section 3.7, *Project Operation*, the facility currently has the capacity to produce approximately 12,000 bpd of renewable fuels from pretreated feedstocks using Unit 250, which was previously used to process petroleum-based feedstocks. Unit 250 is not included in the Project as the Project does not propose any changes for Unit 250 and it would continue to produce 12,000 bpd of renewable fuels. Given that Unit 250 is not part of the Project, Unit 250 feedstock and production numbers are not included in this chart under the No Project Alternative.
- 70,000 bpd out of 105,000 bpd would arrive by pipeline, the rest would arrive through the Marine Terminal.
- Blendstocks and product into the facility would arrive through the Marine Terminal and by rail, and products leaving the facility would be transported by pipeline and rail.
- Reflects operations (not construction) of the Project and Alternatives.
- The amount of existing renewable fuels produced (12,000 bpd) is less than the existing renewable feeds processed (13,000 gpd) due to losses that occur during the production process.

## **Changes to Section 6.4, Cumulative Impacts**

Section 6.4.1, Projects Considered in the Cumulative Analysis, page 6-3 is revised to read as follows:

### ***6.4.1.1 Contra Costa County***

**Selby Slag Remedial Action** is a 66-acre site remediation project located within unincorporated Contra Costa County adjacent to the southern shoreline of the San Pablo Bay and Carquinez Strait. The site is the location of a former smelting facility. The Remedial Action Plan identifies what actions need to take place to remediate the site.

- Application Status: The Remedial Action Plan and EIR is in draft form and under review by the DTSC. No remediation activities have been conducted.

Addition of the Selby Slag project to the cumulative list of projects does not alter the conclusions of the cumulative impact analysis in the Draft EIR.

The following text is added to the existing description of the Martinez Refinery Renewable Fuels Project in Chapter 6, CEQA Statutory Sections, Section 6.4.4.1, Contra Costa County, page 6-4:

**Martinez Refinery Renewable Fuels Project** (File No. CDLP20-02046) is an application for an LUP to implement the Martinez Refinery Renewable Fuels Project located at 150 Solano Way, Martinez. The project would allow the conversion of Marathon's Martinez Refinery facility from the processing of crude oil to the processing of treated and untreated renewable feedstocks. Approximately 48,000 bpd of ~~The~~ renewable feedstocks are expected to include biological based oils (i.e., soybean oil and corn oil), rendered fats, and other miscellaneous renewable feedstocks including used cooking oils or other vegetable oils. The feedstocks would be processed into renewable diesel, naphtha, propane and treated fuel gas. The conversion would include modifications to existing processing units, the installation of new units, and removal of obsolete units. New facilities include a renewable feedstock pretreatment unit, wastewater treatment equipment, and an advanced 3-stage low-NOx thermal oxidizer. All construction, demolition, and addition of new equipment would be within the existing boundaries of the refinery.

Initially, product from the Refinery would be distributed by truck to the Bay Area as well as Central and Northern California. Product would also be transported to destinations outside of the Bay Area by ship via the Avon MOT and Amorco MOT, located approximately 0.5 mile north of the Refinery and approximately 2.5 miles west of the Refinery, respectively. Both terminals would undergo modifications to facilitate receipt of renewable feedstocks and distribution of renewable fuels associated with the proposed Project. Annual vessel traffic would increase from 143 vessels to 400 vessels.

Section 6.4.1.1, under the description of the Chevron Pipe Line Company, page 6-5 is revised as follows:

- The TransMontaigne Partners Pipeline is an existing bi-directional pipeline located immediately adjacent to the western boundary of the Avon Terminal. Presently, neither the Bay Area Products Line nor the facilities at the Avon Terminal connect to the TransMontaigne Partners Pipeline.
- Application Status: Initial Study in process.

The project applicant proposes to add a second connection from the existing Bay Area Products Line to flow refined liquid product to the Chevron Avon Terminal at 611 Solano Way, Martinez, CA 94553. This second connection associated with the Avon Connectivity Project would, if completed, enable Chevron to directly transport refined liquid products from the Avon Terminal to the Kinder Morgan Concord Terminal located in unincorporated Contra Costa County near the City of Concord and would also allow Chevron to directly transport such products from the Avon Terminal to TransMontaigne Partners' Martinez Oil Terminal located in the City of Martinez.

Section 6.4, Cumulative Impacts, Table 6-1 is added to page 6-3.

**Table 6-1 Geographic Context of Cumulative Impacts**

<u>Resource Topic</u>	<u>Geographic Area</u>
<u>Aesthetics</u>	<u>Local – area surrounding Project sites that encompass public viewpoints</u>
<u>Air Quality</u>	<u>Regional - for pollutant emissions that have regional effects, combined air basins within the following air districts were used: BAAQMD; SJVAPCD; San Luis Obispo County Air Pollution Control District; and Santa Barbara County Air Pollution Control District</u> <u>Local/Immediate Vicinity – a refined area was used to evaluate areas with highly localized air emissions, such as NOx and PM</u>
<u>Biological Resources</u>	<u>Regional - within 3-mile radius for more localized effects</u>
<u>Cultural Resources</u>	<u>Local/Immediate Vicinity – area of potential effect (APE)</u>
<u>Energy Conservation</u>	<u>Regional – energy grids serving Project Sites</u>
<u>Geology and Soils</u>	<u>Local/Immediate Vicinity</u>
<u>Greenhouse Gas Emissions</u>	<u>Statewide and Global</u>
<u>Hazards and Hazardous Materials</u>	<u>Regional and Local</u>
<u>Hydrology and Water Quality</u>	<u>Regional and Local</u>
<u>Land Use and Planning</u>	<u>County</u>
<u>Noise and Vibration</u>	<u>Local/Immediate Vicinity</u>
<u>Tribal Cultural Resources</u>	<u>Local/Immediate Vicinity</u>
<u>Wildfire</u>	<u>Local/Immediate Vicinity</u>
<u>Solid Waste</u>	<u>Local – service areas</u>
<u>Environmental Justice</u>	<u>Local/Immediate Vicinity</u>

## **Changes to Appendices**

Draft EIR Appendix B, Air Quality and Greenhouse Gas Emissions Technical Data has been replaced with Revised Appendix B, Air Quality and Greenhouse Gas Emissions Technical Data provided in the Final EIR (as a CD attachment). The revised appendix addresses minor model modifications, which resulted in revised model output sheets. The revised appendix also includes a minor text modification as follows.

### **Appendix B Section 3.4.1.1**

~~Project transiting was modeled as far as approximately 10 nautical miles from the Marine Terminal. Vessel emissions include hoteling at the wharf or at anchor, and vessel maneuvering and transit between the wharf or anchorage area out to the Pilot Buoy located 11 nautical miles west of the Golden Gate. Figure 3-3 shows the modeled transiting route within this 10 nautical mile boundary for all Project sources.~~

# **APPENDIX D**

## **BAAQMD Authority to Construct**





BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

January 20, 2023

Phillips 66 - San Francisco Refinery  
1380 San Pablo Avenue  
Rodeo, CA 94572-1299

Attention: Wilma Dressen, Senior Environmental Consultant

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**Authority to Construct for Permit Application No. 31157, Plant No. 21359**

**Required  
Action**

Your Authority to Construct is enclosed. This Authority to Construct is not a Permit to Operate. **To receive your Permit to Operate you must:**

1. Complete the Start-up Notification portion of the Authority to Construct.
2. Send the Start-up Notification Form to the assigned Permit Engineer via e-mail, fax or mail **at least seven days** prior to operating your equipment. Forms can be found at <https://www.baaqmd.gov/forms/permits>

***Note:** Operation of equipment without sending the Start-up Notification to the District may result in enforcement action.*

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**Authorization  
of Limited Use**

The Authority to Construct authorizes operation during the start-up period from the date of initial operation indicated in your Start-up Notification until the Permit to Operate is issued, up to a maximum of 90 days. All conditions (specific or implied) included in this Authority to Construct will be in effect during the start-up period.

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**Contact  
Information**

If you have any questions, please contact your assigned Permit Engineer:

Jimmy Cheng, Senior Air Quality Engineer

**Tel:** (415) 749-5022    **Fax:** (415) 749-5030    **Email:** [jcheng@baaqmd.gov](mailto:jcheng@baaqmd.gov)

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# BAY AREA AIR QUALITY MANAGEMENT DISTRICT

## Authority to Construct

(This is not a Permit to Operate)

### Phillips 66 - San Francisco Refinery

1380 San Pablo Avenue, Rodeo, CA 94572-1299

is hereby granted an *Authority to Construct* for the following equipment:

Source Number	Equipment Description
S-11	U240_B-201 Heater, 108 MMBtu/hr
	Equipment above is subject to attached condition: 27654, 27811, 27659
S-12	U240 B-202 Heater, 42 MMBtu/hr
	Equipment above is subject to attached condition: 27654, 27811, 27659
S-13	U240_B-301 Heater, 194 MMBtu/hr, abated by A-113 U240 B-301 Heater SCR Unit
	Equipment above is subject to attached condition: 27654, 27811, 27659
S-22	U248_B-606 HEATER, 31 MMBtu/hr
	Equipment above is subject to attached condition: 27654, 27811, 27659
S-45	Heavy Gas Oil Feed Heater, abated by A-47 Selective Catalytic Reduction Unit for U240 HGO Feed Heater
	Equipment above is subject to attached condition: 27815, 22970, 27654, 27659
S-97	TANK NO. 100, 12474 thousand gallons, abated by A-626 Activated Carbon Vessel
	Equipment above is subject to attached condition: 27819, 27646
S-101	Tank 104 Storm Water Equalization, 5500 thousand gallons
	Equipment above is subject to attached condition: 27810
S-102	Tank 105 Storm Water Equalization, 5500 thousand gallons
	Equipment above is subject to attached condition: 27810
S-106	Tank 130 Stormwater Equalization, 10600 thousand gallons
	Equipment above is subject to attached condition: 27810
S-110	TANK NO. 155, 47,000 bbls
	Equipment above is subject to attached condition: 27646
S-111	TANK NO. 156, 100,000 bbls
	Equipment above is subject to attached condition: 27646
S-112	TANK NO. 157, 100,000 bbls
	Equipment above is subject to attached condition: 27646
S-113	TANK NO. 158, 101,000 bbls
	Equipment above is subject to attached condition: 27646
S-114	TANK NO. 159, 136,000 bbls
	Equipment above is subject to attached condition: 27646
S-122	TANK 167, 3.1 MM gallons
	Equipment above is subject to attached condition: 27816
S-125	Tank 170, 3024 thousand gallons
	Equipment above is subject to attached condition: 27787

Source Number	Equipment Description
S-126	Tank No. 172, 75,000 bbls
	Equipment above is subject to attached condition: 27820
S-135	Tank #200, 79,000 bbls, abated by A-7 Vapor Recovery System
	Equipment above is subject to attached condition: 27814, 23724, 27646
S-137	TANK NO. 202, 88,000 bbls, abated by A-7 Vapor Recovery System
	Equipment above is subject to attached condition: 27814, 23724, 27646
S-139	TANK NO. 204, 81,000 bbls, abated by A-7 Vapor Recovery System
	Equipment above is subject to attached condition: 27816, 23724
S-140	TANK #205, 54,000 bbls, abated by A-7 Vapor Recovery System
	Equipment above is subject to attached condition: 27816, 23724
S-150	TANK NO. 241, 79,000 bbls
	Equipment above is subject to attached condition: 27661
S-173	TANK #280, 134,000 bbls, abated by A-7, Vapor Recovery System,
	Equipment above is subject to attached condition: 23724, 27646
S-174	TANK #281, 134,000 bbls, abated by A-7, Vapor Recovery System
	Equipment above is subject to attached condition: 23724, 27646
S-175	TANK #284, 134,000 bbls, abated by A-7, Vapor Recovery System
	Equipment above is subject to attached condition: 23724, 27646
S-195	Tank 501, Sludge (API sediment, DAF float & sediment), 2,500 bbls
	Equipment above is subject to attached condition: 27653
S-254	TANK NO. 1001, 104,000 bbls
	Equipment above is subject to attached condition: 27657
S-256	Tank No. 1003, 104,000 bbls
	Equipment above is subject to attached condition: 27657
S-257	Tank No. 1004, 104,000 bbls
	Equipment above is subject to attached condition: 27657
S-261	TANK NO. 1010, 104,000 bbls
	Equipment above is subject to attached condition: 27823, 27646
S-296	C-1 FLARE, 6.6 MMBtu/hr pilot
	Equipment above is subject to attached condition: 18255
S-307	U240 UNICRACKING UNIT 240
	Equipment above is subject to attached condition: 27647, 27658
S-309	U248_UNISAR UNIT 248
	Equipment above is subject to attached condition: 27647
S-318	Unit 76
	Equipment above is subject to attached condition: 22549, 27658
S-322	U40_RAW MATERIALS RECEIVING
	Equipment above is subject to attached condition: 27658
S-324	324 U100_API OIL WASTEWATER SEPARATOR (with outlet channel cover), abated by A-53 Thermal Oxidizer for S-324
	Equipment above is subject to attached condition: 1440, 26069
S-334	Tank #107, 180,000 bbls

Source Number	Equipment Description
	Equipment above is subject to attached condition: 27813, 27646
S-338	U233 FUEL GAS CENTER, 7.5E6 cubic feet/hr
	Equipment above is subject to attached condition: 27657
S-339	U80_REFINED OIL SHIPPING UNIT
	Equipment above is subject to attached condition: 22968
S-340	TANK #108, 200,000 bbls
	Equipment above is subject to attached condition: 27824, 27646
S-341	TANK #208, 103,000 bbls
	Equipment above is subject to attached condition: 27821
S-342	TANK #209, 103,000 bbls
	Equipment above is subject to attached condition: 27822
S-352	Combustion Turbine (16.6 MW), 291 MMBtu/hr, abated by S-355 Supplemental Firing Duct Burners
	Equipment above is subject to attached condition: 27754, 18629, 27659
S-353	Combustion Turbine (16.6 MW), 291 MMBtu/hr, abated by S-356 Supplemental Firing Duct Burners
	Equipment above is subject to attached condition: 27754, 18629, 27659
S-354	Combustion Turbine (16.6 MW), 291 MMBtu/hr, abated by S-357 Supplemental Firing Duct Burners
	Equipment above is subject to attached condition: 27754, 18629, 27659
S-355	Supplemental Firing Duct Burners, 175 MMBtu/hr, abated by A-13 SCR/CO Converter Unit
	Equipment above is subject to attached condition: 27754, 18629, 27659
S-356	Supplemental Firing Duct Burners, 175 MMBtu/hr, abated by A-14 SCR/CO Converter Unit
	Equipment above is subject to attached condition: 27754, 18629, 27659
S-357	Supplemental Firing Duct Burners, 175 MMBtu/hr, abated by A-15 SCR/CO Converter Unit
	Equipment above is subject to attached condition: 27754, 18629, 27659
S-360	Mid-Barrel Tank 223, 110,000 bbls, abated by A-7 Vapor Recovery System
	Equipment above is subject to attached condition: 23724, 27646
S-381	Aeration Tank, Pact (F-201), 1.2 MM gallons
	Equipment above is subject to attached condition: 1440
S-382	Aeration Tank, Pact (F-202), 1.2 MM gallons
	Equipment above is subject to attached condition: 1440
S-383	Clarifier, F-203, 0.69 MM gallons
	Equipment above is subject to attached condition: 1440
S-384	Clarifier (F-204), 0.69 MM gallons
	Equipment above is subject to attached condition: 1440
S-385	Media Filter (F-271 to F-278), 420,000 gallons/hr
	Equipment above is subject to attached condition: 1440
S-386	PAC Regeneration Sludge Thickener (F-211), 44,000 gallons
	Equipment above is subject to attached condition: 1440
S-387	Wet Air Regeneration (P-202), 15 gpm
	Equipment above is subject to attached condition: 1440
S-390	F-248 Thickened Sludge Storage, 26.5 thousand gallons
	Equipment above is subject to attached condition: 1440
S-398	MP-30 Flare, 3.1 MMBtu/hr pilot

Source Number	Equipment Description
	Equipment above is subject to attached condition: 18255
S-400	Wet Weather Wastewater Sump, abated by A-40 Wet Weather Sump Vented Cover
	Equipment above is subject to attached condition: 1440
S-401	Dry Weather Wastewater Sump, abated by A-41 Dry Weather Sump Vented Cover
	Equipment above is subject to attached condition: 1440
S-425	Marine Terminal Berth M1, 2 permitted arms, abated by A-420 Thermal Oxidizer
	Equipment above is subject to attached condition: 27655
S-426	Marine Terminal Berth M2, 4 permitted arms, abated by A-420 Thermal Oxidizer
	Equipment above is subject to attached condition: 27655
S-434	U246 High Pressure Reactor Train
	Equipment above is subject to attached condition: 22970, 27647, 27658
S-437	Hydrogen Manufacturing Unit, abated by S-438 U110_H-1 Furnace (H2 Plant Reforming)
	Equipment above is subject to attached condition: 27658
S-438	U110_H-1 Furnace (H2 Plant Reforming), 250 MMBtu/hr, abated by A-46 Selective Catalytic Reduction Unit
	Equipment above is subject to attached condition: 27654, 27659
S-445	Tank 271, 189,000 bbls, abated A-7 Vapor Recovery System
	Equipment above is subject to attached condition: 27808, 23724, 27646
S-446	Tank 310 (ISOPENTANE), 1722 thousand gallons, abated by A-7 Vapor Recovery System
	Equipment above is subject to attached condition: 27808
S-447	Tank 311 (Isopentane), 1722 thousand gallons, abated by A-7 Vapor Recovery System
	Equipment above is subject to attached condition: 27808
S-448	Tank 1007 (Blendstock Receiving), 243,000 bbls
	Equipment above is subject to attached condition: 27809, 27646
S-449	TANK #285, 189,000 bbls, abated by A-7, Vapor Recovery System
	Equipment above is subject to attached condition: 27656, 23724, 27646
S-453	U236 Cooling Tower, 13,500 gpm
	Equipment above is subject to attached condition: 27812, 27660
S-455	U240 Cooling Tower, 33,000 gpm
	Equipment above is subject to attached condition: 27812, 27660
S-465	Unit 235 Sulfur Pit-Tank, 200 long ton/day, abated by S-1010 U235 Sulfur Recovery Unit
	Equipment above is subject to attached condition: 27817
S-503	Sulfur Storage Tank, 471 long ton/day, abated by S-1010 Sulfur Plant Unit 235
	Equipment above is subject to attached condition: 27818
S-504	Sulfur Degassing Unit, 400 long ton/day, abated by S-1010 Sulfur Plant Unit 235
	Equipment above is subject to attached condition: 27818
S-505	Sulfur Truck Loading Rack, 200 gpm sulfur, abated by S-1010 Sulfur Plant Unit 235
	Equipment above is subject to attached condition: 27818
S-506	Fixed Roof Tank 257, 80,000 bbls, abated by A-7, Vapor Recovery System,
	Equipment above is subject to attached condition: 23724, 27646
S-1007	U100-Dissolved Air Flotation Unit (with fixed roof), abated by: A-49 Thermal Oxidizer A-51 DAF Carbon Bed A-53 Thermal Oxidizer for S-324

Source Number	Equipment Description
	Equipment above is subject to attached condition: 1440
S-1008	U100_Primary Stormwater Basin
	Equipment above is subject to attached condition: 1440
S-1009	U100_Main Stormwater Basin
	Equipment above is subject to attached condition: 1440
S-1010	U235 Sulfur Recovery Unit, 200 long ton/day, abated by A-48 Sulfur Plant Tail Gas Treatment Plant
	Equipment above is subject to attached condition: 22970, 27818, 27817, 27648
S-599	<p>Sour Water Strippers and Amine Gas Treatment System, abated by Unit 237 Sulfur Treatment Unit (2 Trains), consisting of:</p> <p>Train #1: A-598 Thermal Oxidizer (B-201 Main Burner, B-202 Reduction Furnace, B-203 Oxidation Furnace, B-204 Auxiliary Burner, and E-205 Waste Heat Boiler, 7.4 MMBtu/hr) and A-599 SO<sub>2</sub> Scrubber (D-211 Venturi, D-212 Caustic Scrubber, D-213 Cold Stack)</p> <p>Train #2: A-600 Thermal Oxidizer (B-201 Main Burner, B-202 Reduction Furnace, B-203 Oxidation Furnace, B-204 Auxiliary Burner, and E-205 Waste Heat Boiler, 7.4 MMBtu/hr) and A-601 SO<sub>2</sub> Scrubber (D-211 Venturi, D-212 Caustic Scrubber, D-213 Cold Stack)</p>
	Equipment above is subject to attached condition: 27648, 27658
S-600	Pretreatment Unit (PTU), consisting of 3 trains, 80,000 bbls/day, abated by A-622 and A-624 Biofilters and A-623 and A-625 Carbon Adsorption Systems
	Equipment above is subject to attached condition: 27649, 27658
S-602	Filter Aid Storage Silos (9) and Truck Loading/Traffic, each abated by A-606 through A-614 Pulse Jet Dust Houses (9), 1,600 dscfm maximum each
	Equipment above is subject to attached condition: 27650
S-603	Polyethylene Removal Filter Aid Day Hoppers (4), abated by A-615 and A-618 Dust Filters (4), 665 dscfm maximum each
	Equipment above is subject to attached condition: 27651
S-605	Filter Aid Adsorption Day Hoppers (3), abated by A-619 and A-621 Dust Filters (3), 665 dscfm maximum each
	Equipment above is subject to attached condition: 27652
S-606	Spent Water Tank (at S-600 Pretreatment Unit), 98,100 gallons, abated by abated by A-598, Biofilter and A-599 Carbon Adsorption System
	Equipment above is subject to attached condition: 27649
S-612	DAFs (2), 17,000 gallons each (at S-600 Pretreatment Unit), abated by A-622 and A-624 Biofilters and A-623 and A-625 Carbon Adsorption Systems
	Equipment above is subject to attached condition: 27649
S-613	Process Tanks (3), 4,700 gallons, 128,388 gallons and 528 gallons (at S-600 Pretreatment Unit), abated by A-622 and A-624 Biofilters and A-623 and A-625 Carbon Adsorption Systems
	Equipment above is subject to attached condition: 27649
S-616	Collection Tanks (2), 21,134 gallons each (at S-600 Pretreatment Unit)
	Equipment above is subject to attached condition: 27649



Source Number	Equipment Description
A-598	Thermal Oxidizer (B-201 Main Burner, B-202 Reduction Furnace, B-203 Oxidation Furnace, B-204 Auxiliary Burner, and E-205 Waste Heat Boiler, 7.4 MMBtu/hr)
	Equipment above is subject to attached condition: 27648
A-599	SO2 Scrubber (D-211 Venturi, D-212 Caustic Scrubber, D-213 Cold Stack)
	Equipment above is subject to attached condition: 27648
A-600	Thermal Oxidizer (B-201 Main Burner, B-202 Reduction Furnace, B-203 Oxidation Furnace, B-204 Auxiliary Burner, and E-205 Waste Heat Boiler, 7.4 MMBtu/hr)
	Equipment above is subject to attached condition: 27648
A-601	SO2 Scrubber (D-211 Venturi, D-212 Caustic Scrubber, D-213 Cold Stack)
	Equipment above is subject to attached condition: 27648
A-606	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-607	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-608	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-609	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-610	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-611	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-612	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-613	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-614	Pulse Jet Dust House, Belgrade 330, 1600 scfm maximum or equivalent, 0.0015 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27650
A-615	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27651
A-616	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27651
A-617	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27651
A-618	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27651
A-619	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27652
A-620	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27652
A-621	Venturi-Jet Dust Filter, Kice Model VR16-6H, 665 scfm or equivalent, 0.002 gr/dscf PM10 maximum
	Equipment above is subject to attached condition: 27652

Source Number	Equipment Description
A-622	Biofilter
	Equipment above is subject to attached condition: 27649
A-623	PTU FOG Carbon Adsorption, 2,200 scfm maximum
	Equipment above is subject to attached condition: 27649
A-624	Biofilter
	Equipment above is subject to attached condition: 27649
A-625	PTU FOG Carbon Adsorption, 2,200 scfm maximum
	Equipment above is subject to attached condition: 27649
A-626	Activated Carbon Vessel, 2 in parallel, while 2 are connected on standby
	Equipment above is subject to attached condition: 27819

Issue date: 1/20/2023  
Expiration date: 1/20/2025

Approved by



for

SHARON L. LANDERS  
INTERIM EXECUTIVE OFFICER / APCO



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. All Sources Facility-Wide**

**Condition No. 20773FW**

**Plant No. 21359**

**Application No. 31157**

**CONDITION 20773, TANKS EXEMPT FROM REGULATION 8, RULE 5**

This condition applies to tanks that are exempt from Regulation 8, Rule 5, Storage of Organic Liquids, due to the exemption in Regulation 8-5-117 for storage of organic liquids with a true vapor pressure of less than or equal to 25.8 mm Hg (0.5 psia).

1. Whenever the type of organic liquid in the tank is changed, the owner/operator shall verify that the true vapor pressure at the storage temperature is less than or equal to 25.8 mm Hg (0.5 psia). The owner/operator shall use Lab Method 28 from Volume III of the District's Manual of Procedures, Determination of the Vapor Pressure of Organic Liquids from Storage Tanks. For materials listed in Table 1 of Regulation 8, Rule 5, the owner/operator may use Table 1 to determine vapor pressure, rather than Lab Method 28. If the results are above 25.8 mm Hg (0.5 psia), the owner/operator shall report non-compliance in accordance with Standard Condition I.F and shall submit an application to the District for a new permit to operate for the tank as quickly as possible. [Basis: 8-5-117 and 2-6-409.2]
2. The results of the testing shall be maintained in a District-approved log for at least five years from the date of the record, and shall be made available to District staff upon request. [Basis: 2-6-409.2]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. All Sources Facility-Wide**

**Condition No. 27646FW**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance) - Phillips 66 Rodeo Renewed Fuels Project.

General:

1. a.
  - The owner/operator shall ensure that all of the following sources are not used in the process of unloading renewable feedstock, producing renewable fuels, loading renewable fuels, handling waste related to renewable fuels production or processing or any other activities associated with the Rodeo Renewed project: S-2, S-3, S-4, S-5, S-7, S-9, S-10, S-15, S-16, S-17, S-18, S-19, S-20, S-21, S-31, S-43, S-44, S-133, S-300, S-304, S-305, S-306, S-308, S-319, S-336, S-337, S-370, S-371, S-372, S-432, S-433, S-435, S-436, S-452, S-457, S-458, S-462, and S-463. Prior to operating any of the sources above with the renewable fuels process, the owner/operator shall submit an application to the Air District's Engineering Division for review and receive approval from the Air District.  
(Basis: Regulation 2-1-403 Permit Conditions)
- 1b.
  - The owner/operator shall ensure that all of the following sources that are in operation are not used in the process of unloading renewable feedstock, producing renewable fuels, loading renewable fuels, handling waste related to renewable fuels production or processing or any other activities associated with the Rodeo Renewed project: S-98, S-100, S-107, S-115, S-123, S-124, S-128, S-129, S-134, S-136, S-138, S-149, S-151, S-168, S-169, S-171, S-177, S-178, S-180, S-182, S-183, S-184, S-186, S-191, S-192, S-194, S-209, S-239, S-255, S-258, S-259, S-286, S-287, S-289, S-293, S-343, S-380, S-392S-427, S-428, S-429, S-440, S-444, S-446, S-447, S-507 and/or any other sources that are in operation but is not part of Application 31157. Prior to operating any of the sources above with the renewable fuels process, the owner/operator shall submit an application to the Air District's Engineering Division for review and receive approval from the Air District.  
(Basis: Regulation 2-1-403 Permit Conditions)
2. The owner/operator of Pretreatment Unit (S-600), Unicracking U240 (S-307) and High Pressure Reactor Train U246 (S-434) shall not process any crude oil feedstock and/or any liquid petroleum based feedstock at these sources. (Basis: Regulation 2-1-403 Permit Conditions)

*Documentation:*

The following permit conditions will be used to verify permitting actions/determinations and assumptions used for issuance of the Authority to Construct, which is based on preliminary information.

3. Prior to the issuance of the permit to operate, the owner/operator shall submit the following items to the Air District's Engineering Division (each referencing Permit Application #31157, Permit Condition 27646, Part 3):
  - Final as-built fugitive component counts including new and replaced components of all sources in Condition 27658 in the Rodeo Renewed Project
  - Final design drawings and specification for S-97 (Tank 100) and Activated Carbon Vessel (A-626 – 4 in parallel)
  - Final design drawings and specification for Biofilter (A-622) and Activated Carbon Vessel (A-623), and/or Biofilter (A-624) and Activated Carbon Vessel (A-625)
  - Final design drawings and specification for A-598 through A-601 (S-599 STU Unit)
  - Final as-built Process Flow Diagrams and/or block flow diagrams for all changes associated with the Rodeo Renewed Project, including but not limited to the blending operation at Unit 76 and U 80
  - Subsequent revisions to product Safety Data Sheet (SDS) (Renewable Diesel, Propane, Naphtha, etc.).



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. All Sources Facility-Wide**

**Condition No. 27646FW**

**Plant No. 21359**

**Application No. 31157**

- Submit a Device Data Update Form (Form DDU) for all shut down sources  
(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase)

*New Source Performance Standards (NSPS) and National Emissions Standards for Hazardous Air Pollutants (NESHAP) Applicability Determination and Compliance:*

4. The owner/operator of S-107, S-133, S-139, S-140, S-168, S-182, S-324, S-1007, A-49 and/or A-51 shall determine the facility's total annual benzene (TAB) quantity from facility waste within 90 days of achieving the maximum processing rate of 69,000 bpd, but no later than 180 days after the startup of S-307 (U240) and S-434 (U246) regardless of the capacity achieved. This determination shall be performed while S-460 (U250) is in operation at the same time. The total annual benzene quantity shall be determined in accordance with 40 CFR Part 61, Subpart FF, §61.355. The results shall be submitted to the Air District's Engineering Division no later than 30 days from the date of the analysis or any data used for the analysis as required in 40 CFR 61.357. If the TAB report is calculated to be less than 10 Megagram (11 tons) per year, the owner/operator shall notify the Air District to confirm the report, to reclassify the facility as exempt from the control standards of 40 CFR 51, Subpart FF, and to confirm compliance with any other applicable regulatory requirements prior to issuance of the permit to operate. If the analysis is greater than or equal to 10 Megagram (11 tons) per year, the owner/operator shall continue to comply with control standards as provided in 40 CFR 61.355, Subpart FF. The TAB shall be updated as required in 40 CFR 61.355. The reports shall be submitted as required in 40 CFR 61.355, Subpart FF. The owner/operator shall submit a Title V significant revision application in order to address any applicable regulatory changes based on the TAB determination.  
(Basis: 40 CFR Part 61, Subpart FF, §61.340 - Applicability)
5. The owner/operator of S-101, S-102, S-106, S-324, S-381 through S-387, S-390, S-400, S-401, and/or S-1007 shall determine the designation of process wastewater streams (Group 1 or Group 2) in accordance with 40 CFR §63.132 and 63.2485(c) and demonstrate compliance with Table 7 of 40 CFR Part 63, Subpart FFFF, within 90 days of achieving maximum processing capacity of 69,000 bpd, but no later than 180 days after the startup of S-307 (U240) and S-434 (U246). This determination shall be performed while S-460 (U250) is in operation at the same time. The analysis results that include the sampling test data shall be submitted to the Air District's Engineering Division no later than 60 days from the date of the analysis. After the analysis is complete the Air District will confirm compliance with any applicable regulations and add any associated additional conditions as necessary to maintain compliance with any applicable regulatory requirements prior to issuance of the permit to operate.  
(Basis: 40 CFR Part 63, Subpart FFFF, §63.2485 – Requirements for Wastewater Streams)
6. The owner/operator of S-11, S-12, S-13, S-22, S-45, and S-438 shall demonstrate that fuel gas combusted at these sources qualifies as an "other gas 1 fuel," as defined in 40 CFR §63.7575, in accordance with procedures established in 40 CFR §63.7521(f) through (i) and according to the frequency listed in 40 CFR §63.7575(c) and maintain records of the results of the testing as outlined in 40 CFR §63.7555(g). The determination shall be submitted to the Air District's Engineering Division no later than 60 days from the date of the analysis. If the initial sample does not qualify as an "other gas 1 fuel," sources listed in this Part are not considered units designed to burn gas 1 subcategory and shall be in compliance with the emission and operating limits for the appropriate subcategory in Subpart DDDDD. After sampling is complete the Air District will confirm compliance with any applicable regulations and add any associated additional conditions as necessary to maintain compliance with any applicable regulatory requirements prior to issuance of the permit to operate.  
(Basis: 40 CFR 63, Subpart DDDDD, §63.7530(g) – Initial Fuel Speciation Analysis, Recordkeeping).

*Initial Compliance Demonstration:*



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**Condition No. 27646FW**

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7. The owner/operator shall conduct initial compliance source test on API Separator (S-324)/ Thermal Oxidizers (A-53), DAF Unit (S-1007)/ Thermal Oxidizers (A-49) and/or Carbon Adsorption System (A-51) to demonstrate compliance with Permit Condition #26069 Part 1 and #1440, Parts 7b and 7c, respectively. The owner/operator shall notify the Air District's Source Test Section and Engineering Division in writing of the source test protocols and projected test dates at least 30 days in advance of the initial compliance source test such that the Air District may observe during testing. The results shall be delivered to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of the test. Initial compliance source test shall be conducted within 90 days after achieving 80% of 69,000 bpd, but no later than 180 days after the startup of the Rodeo Renewed Project and shall only use Air District approved source test methods and procedures.  
(Basis: Regulation 2-1-403 Compliance Demonstration)

*Material Speciation Lab Analyses:*

8. a.
- Within 180 days of the startup of S-600 Pretreatment Unit (first two trains) of the Rodeo Renewed Project, the owner/operator shall conduct sampling and testing to determine the level of air toxics (Toxic Air Contaminant, (TAC)) in feed and product streams (including renewable gasoline, renewable jet, renewable diesel and renewable naphtha) for the following process units: S-600 Pretreatment Unit (PTU-first two trains), Unicracking U240 (S-307) and High Pressure Reactor Train U246 (S-434), and Unisar Unit 248 (S-309). Sampling and testing shall be performed under normal "as found" operations for each feedstock (including Soybean Oil, Corn Oil, Canola Oil, Tallow, Used Cooking Oil (UCO), Inedible Corn Oil, Fat Oil Grease (FOG), other Vegetable-Based Oils and/or blended feedstocks. Sampling and testing shall be completed using ASTM D6730 light liquid and gas streams, or D2425 for heavy liquid streams, unless alternative sampling and testing methods are approved by the Air District. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
    - i. Material speciation lab results and/or testing methods used for feed and product streams;
    - ii. Type of feedstock used during the sampling and testing;
    - iii. Feed/Processing Rate;
    - iv. Reference to Permit Application #31157, Permit Condition 27646, Part 8a;
    - v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
    - vi. The owner/operator of the above sources shall submit the revised TAC emissions calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher or contain any different TACs than TAC calculations approved in the Rodeo Renewed Project at the time of the issuance of the Authority to Construct. Exceeding any of the emission rates in the calculations approved at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements with the higher emissions rates and different TAC speciation.
- (Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

8b.





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. All Sources Facility-Wide**

**Condition No. 27646FW Plant No. 21359**

**Application No. 31157**

- Within 180 days of the startup of S-600 Pretreatment Unit (3<sup>rd</sup> train) of the Rodeo Renewed Project, the owner/operator shall conduct sampling and testing to determine the level of air toxics (Toxic Air Contaminant, (TAC)) in feed and product streams (including renewable gasoline, renewable jet, renewable diesel and renewable naphtha) for the following process units: S-600 Pretreatment Unit (PTU-all three trains), Unicracking U240 (S-307) and High Pressure Reactor Train U246 (S-434), and Unisar Unit 248 (S-309). Sampling and testing shall be performed under normal "as found" operations for each feedstock (including Soybean Oil, Corn Oil, Canola Oil, Tallow, Use Cooking Oil (UCO), Inedible Corn Oil, Fat Oil Grease (FOG), other Vegetable-Based Oils and/or blended feedstocks). Sampling and testing shall be completed using ASTM D6730 light liquid and gas streams, or D2425 for heavy liquid streams, unless alternative sampling and testing methods are approved by the Air District. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
  - i. Material speciation lab results and/or testing methods used for feed and product streams;
  - ii. Type of feedstock used during the sampling and testing;
  - iii. Feed/Processing Rate;
  - iv. Reference to Permit Application #31157, Permit Condition 27646, Part 8b;
  - v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project; and
  - vi. The owner/operator of the above sources shall submit the revised TAC emissions calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions are found to be higher or contain any different TACs than the approved calculations in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

*Wastewater Lab Analyses:*

- 9. a.
  - Within 180 days of the startup of S-600 Pretreatment Unit (first two trains) of the Rodeo Renewed Project, the owner/operator shall conduct sampling and testing to determine wastewater stream (influent to S-381/S-382 PACT) organic and TAC speciation under maximum or near maximum capacity (80% of 80,000 bpd) or normal "as found" operation using the following Air District approved test methods, unless alternative sampling and testing methods are approved by the Air District: EPA Method 350.1, EPA Method 1664A, SM 4500-S2, EPA Method 420.4, and EPA Method 624.1. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
    - i. Material speciation lab results and/or testing method used for wastewater streams;
    - ii. Type of feedstock used during the sampling and testing;
    - iii. Feed/Processing Rate;



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- iv. Reference to Permit Application #31157, Permit Condition 27646, Part 9a;
- v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
- vi. The owner/operator of the above sources shall submit the revised TAC emission calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher or contain any different TACs than the calculations approved in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-1-403 Permit Conditions, Regulation 2-5 toxics)

9b.

- Within 180 days of the startup of S-600 Pretreatment Unit (3<sup>rd</sup> train) of the Rodeo Renewed Project, the owner/operator shall conduct sampling and testing to determine wastewater stream (influent to S-381/S-382 PACT) organic and TAC speciation under maximum or near maximum capacity (80% of 80,000 bpd) operation using the following Air District approved test methods, unless alternative sampling and testing methods are approved by the Air District: EPA Method 350.1, EPA Method 1664A, SM 4500-S2, EPA Method 420.4, and EPA Method 624.1. If within 180 days, if the owner/operator of S-600 is not operating at maximum or near maximum capacity (80% of 80,000 bpd), then the owner/operator shall perform sampling and testing at the interim (as found) operating capacity. Within 90 days from the date when the maximum or near maximum capacity (80% of 80,000 bpd) is attained, the owner/operator shall repeat the sampling and testing at this maximum or near maximum capacity. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
  - i. Material speciation lab results and/or testing method used for wastewater streams;
  - ii. Type of feedstock used during the sampling and testing;
  - iii. Feed/Processing Rate;
- iv. Reference to Permit Application #31157, Permit Condition 27646, Part 9b;
- v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
- vi. The owner/operator of the above sources shall submit the revised TAC emission calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher or contain any different TACs than the calculations approved in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements.



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(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

10. a

- Within 180 days of the startup of S-600 Pretreatment Unit (first two trains) of the Rodeo Renewed Project, the owner/operator shall conduct sampling and testing to determine the amine and sour water influent streams (effluent of S-599 Amine/Sour Water Strippers) organic and TAC speciation under maximum or near maximum capacity (80% of 80,000 bpd) or normal “as found” operation using the following Air District approved test methods, unless alternative sampling and testing methods are approved by the Air District: SW 8260B, Hach TNT 832, UOP 209-00B, EPA Method 610. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
  - i. Material speciation lab results and/or testing method used for amine and sour water streams;
  - ii. Type of feedstock used during the sampling and testing;
  - iii. Feed/Processing Rate;
  - iv. Reference to Permit Application #31157, Permit Condition 27646, Part 10a;
  - v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
  - vi. The owner/operator of the above sources shall submit the revised TAC emissions calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher or contain any different TACs than the calculations approved in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the ACor finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

10b.

- Within 180 days of the startup of S-600 Pretreatment Unit (3<sup>rd</sup> train) of the Rodeo Renewed Project, the owner/operator shall conduct sampling and testing to determine the amine and sour water influent streams (effluent of S-599 Amine/Sour Water Strippers) organic and TAC speciation under maximum or near maximum capacity (80% of 80,000 bpd) operation using the following Air District approved test methods, unless alternative sampling and testing methods are approved by the Air District: SW 8260B, Hach TNT 832, UOP 209-00B, EPA Method 610. If within 180 days, if the owner/operator of S-600 is not operating at maximum or near maximum capacity (80% of 80,000 bpd), then the owner/operator shall perform sampling and testing at the interim (as found) operating capacity. Within 90 days from the date when the maximum or near maximum capacity (80% of 80,000 bpd) is attained, the owner/operator shall repeat the sampling and testing at this maximum or near maximum capacity. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:



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- i. Material speciation lab results and/or testing method used for amine and sour water streams;
- ii. Type of feedstock used during the sampling and testing;
- iii. Feed/Processing Rate;
- iv. Reference to Permit Application #31157, Permit Condition 27646, Part 10b;
- v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
- vi. The owner/operator of the above sources shall submit the revised TAC emissions calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher or contain any different TACs than the calculations approved in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

11. a.

- Within 180 days of the startup of S-600 Pretreatment Unit (first two trains) of the Rodeo Renewed Project, the owner/operator shall conduct sampling and testing to determine fuel gas composition and TAC speciation under maximum or near maximum capacity (80% of 80,000 bpd) or normal "as found" operation using the following Air District approved test methods, unless alternative sampling and testing methods are approved by the Air District: ASTM D7833 and ASTM D5504. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
  - i. Material speciation lab results and/or testing methods used for fuel gas streams;
  - ii. Type of feedstock used during the sampling and testing;
  - iii. Feed/Processing Rate;
  - iv. Reference to Permit Application #31157, Permit Condition 27646, Part 11a;
  - v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
  - vi. The owner/operator of the above sources shall submit the revised TAC emissions calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher or contain any different TACs or contain any different TACs than the calculations approved in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements with the higher emissions rates and different TAC speciation.



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(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

11b.

- Within 180 days of the startup of S-600 Pretreatment Unit (3<sup>rd</sup> train) of the Rodeo Renewed Project, the owner/operator shall conduct sampling and testing to determine fuel gas composition and TAC speciation under maximum or near maximum capacity (80% of 80,000 bpd) operation using the following Air District approved test methods, unless alternative sampling and testing methods are approved by the Air District: ASTM D7833 and ASTM D5504. If within 180 days, if the owner/operator of S-600 is not operating at maximum or near maximum capacity (80% of 80,000 bpd), then the owner/operator shall perform sampling and testing at the interim (as found) operating capacity. Within 90 days from the date when the maximum or near maximum capacity (80% of 80,000 bpd) is attained, the owner/operator shall repeat the sampling and testing at this maximum or near maximum capacity. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test method and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
  - i. Material speciation lab results and/or testing method used for fuel gas streams;
  - ii. Type of feedstock used during the sampling and testing;
  - iii. Feed/Processing Rate;
  - iv. Reference to Permit Application #31157, Permit Condition 27646, Part 11b;
  - v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
  - vi. The owner/operator of the above sources shall submit the revised TAC emissions calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher or contain any different TACs than the calculations approved in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements with the higher emissions rates and different TAC speciation.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

12. a.

- Within 180 days of the startup of S-600 Pretreatment Unit (first two trains) of the Renewed Fuel Project, the owner/operator of each S-453 and/or S-455 Cooling Tower shall conduct sampling and testing for total hydrocarbon concentration to determine cooling tower water TAC speciation under maximum or near maximum capacity (80% of 80,000 bpd) or normal "as found" operation using the following Air District approved test methods, unless alternative sampling and testing methods are approved by the Air District: EPA Method 8015D and/or Method 8260/70. Alternatively, the owner/operator may use cooling tower water lab analysis results for compliance with Air District Regulation 11, Rule 10. The report shall be submitted to the Air District's Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
  - i. Material speciation lab results and/or testing methods used for cooling tower water streams;





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- ii. Type of feedstock used during the sampling and testing;
- iii. Feed/Processing Rate;
- iv. Reference to Permit Application #31157, Permit Condition 27646, Part 12a;
- v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
- vi. The owner/operator of the above sources shall submit the revised TAC emissions calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher than the calculations approved in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

12b.

- Within 180 days of the startup of S-600 Pretreatment Unit (3<sup>rd</sup> train) of the Renewed Fuel Project, the owner/operator shall conduct sampling and testing for total hydrocarbon concentration to determine cooling tower water and TAC speciation under maximum or near maximum capacity (80% of 80,000 bpd) operation using the following Air District approved test methods, unless alternative sampling and testing methods are approved by the Air District: EPA Method 8015D and/or Method 8260/70. Alternatively, the owner/operator may use cooling tower water lab analysis results for compliance with Air District Regulation 11, Rule 10. If within 180 days, if the owner/operator of S-600 is not operating at maximum or near maximum capacity (80% of 80,000 bpd), then the owner/operator shall perform sampling and testing at the interim (as found) operating capacity. Within 90 days from the date when the maximum or near maximum capacity (80% of 80,000 bpd) is attained, the owner/operator shall repeat the sampling and testing at this maximum or near maximum capacity. The report shall be submitted to the Air District's Engineering Division no later than 60 days from the date of completion of sampling and testing. The report shall include the following:
  - i. Material speciation lab results and/or testing methods used for cooling tower water streams;
  - ii. Type of feedstock used during the sampling and testing;
  - iii. Feed/Processing Rate;
  - iv. Reference to Permit Application #31157, Permit Condition 27646, Part 12b;
  - v. The sampling and/or test results shall be used to recalculate the TAC emissions if any TAC concentration or TAC composition is found to be higher or contain any different TACs than the estimated TAC emissions for each exempt, new, altered and/or modified source in the Rodeo Renewed Project;
  - vi. The owner/operator of the above sources shall submit the revised TAC emissions calculations to the Air District for Health Risk Assessment (HRA) review if the TAC emissions from sampling and testing are found to be higher or contain any different TACs than the calculations approved in the Rodeo Renewed Project at the time of issuance of the Authority to Construct. Exceeding any of the emission rates used within the approved calculations at the time of issuance of the AC or finding different TACs in the sampling and testing is not considered a violation provided that the owner/operator can demonstrate compliance with Regulation 2-5-302 project risk requirements.





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(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)

*True Vapor Pressure of Renewable feedstocks and all renewable Products*

13. On a monthly basis, the owner/operator of S-425 and/or S-426 shall use Air District approved ASTM D6378 (or ASTM 2879) to determine the true vapor pressure and loading emission factors of renewable feedstocks, renewable diesel, renewable jet, renewable gasoline, and any other renewable products such that the measured true vapor pressure are representative of the maximum true vapor pressure of renewable feedstocks, renewable diesel, renewable gasoline, renewable jet, and any other renewable products for that month. The results shall be used to calculate emissions from renewable feedstock and all renewable products loading operations and to demonstrate compliance with Permit Condition #4336, Parts 15 and 16. The owner/operator shall submit the results to the Air District's Engineering Division no later than 30 days after the twelfth month of testing. After twelve months of testing, the owner/operator may propose a change in testing frequency based on established true vapor pressure of renewable feedstocks and all renewable products from testing. Written approval by the Air District's Engineering Division must be received by the owner/operator prior to a change in testing schedule.

(Basis: Regulation 2-1-403 Permit Conditions)

14. The owner/operator of S-425 and S-426 may develop an Air District approved correlation between true vapor pressure and initial boiling point using ASTM D86 to comply with Part 13. The testing plan shall include the following:

- Testing schedule (i.e., number of tests/data points);
- Parameters and test methods;
- Acceptance criteria (i.e., correlated or uncorrelated);

The owner/operator shall obtain written approval from the Air District's Engineering Division prior to using the correlation, if any, for the determination of true vapor pressure.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase)

15. Within 180 days of the authority to construct issuance of the Rodeo Renewed Project, the owner/operator of Sources S-307, S-434 and/or S-1010 shall submit a separate New Source Review application to the Air District to change the combined bubble permit limits in condition #1694, Part A.4, #23125, Part 11, and #22970, Part 2.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase)

16. The owner/operator of the Rodeo Renewed Project shall document, monitor, and maintain the following records to demonstrate the non-applicability determination of a major modification (as defined in Regulation 2-1-234):

- Description of the project;
- Identification of all of the sources associated with the Rodeo Renewed Project;
- Description of the applicability calculations used to determine that the Rodeo Renewed Project is not a "major modification" for that pollutant, including baseline actual emissions, projected actual emissions, and any "netting" that was used; and
- Monitor and keep a record of emissions at each source associated with the Renewable Fuels Project (in tons per year on a calendar year basis).
- The report shall be signed by the responsible official as being true, accurate and complete.

These records shall be kept on-site for at least 5 years. All records shall be recorded in an Air District approved log and made available for inspection by Air District staff upon request.

After 5 calendar years of the Rodeo Renewed Project operation, the owner/operator shall submit a report to the Air District's Engineering Division and EPA stating (i) the facility name, address, telephone number,



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(Basis: Regulation 2-1-234.2 Increase Over Actual Emissions Baseline)

17. Within 180 days of operation, the owner/operator of Pretreatment Unit, S-600, shall perform an Air District-approved source test to demonstrate compliance with the 0.32 g/m<sup>2</sup> silt loading factor for paved roads within the facility boundary. The owner/operator shall submit a silt loading testing protocol, which includes the locations and procedures according to AP-42, to the Air District's Engineering Division for approval prior to testing. Any exceedance of the 0.32 g/ m<sup>2</sup> silt loading factor used for paved roads shall be considered a violation of this condition and shall require the owner/operator to submit a permit application to the Air District for review. (Basis: Regulation 2-2-208 Cumulative Increase)
18. Within 180 days of the startup of each source S-11, S-12, S-13, S-22, S-45, S-352 through S-357, S-438, A-599/A-600 and/or A-601/A-602, the owner/operator shall conduct an initial and at least once every consecutive 5 year period thereafter (in the year prior to the Title V Permit Renewal application submittal) compliance source testing in order to demonstrate compliance with the Vapor Recovery System A-7's minimum capture and destruction efficiency of at least 98% by weight per:
  - Permit Condition 22963, Part 3 for S-139 and S-140, storage tanks
  - Permit Condition 12131 for S-446, storage tank
  - Permit Condition 12132 for S-447, storage tank

The owner/operator shall notify the Air District's Compliance and Enforcement Division, Source Test Section, and Engineering Division at least 30 days in advance of the initial and once every consecutive 5 year period compliance source tests such that the Air District may observe during testing. The results shall be delivered to the Air District's Source Test Section no later than 60 days from the date of the test. If the TOC capture and destruction efficiency is greater than or equal to 98% by weight, the source testing results show compliance with the assumptions used in analysis for the issuance of the authority to construct of the Renewable Fuels Project and no further action will be required. For the purpose of these conditions TOC shall be considered equal to POC and equal to NMOC.

For each source, the owner/operator of S-11, S-12, S-13, S-22, S-45, S-352 through S-357, S-438, A-599/A-600 and/or A-601/A-602 shall measure the following:

- the fuel feed rate in SCFM
- the TOC emission rate at the stack
- the flue gas flow rate in SCFM at the stack
- the oxygen content of the stack flue gas
- the destruction efficiency of TOC as measured across the Furnace/combustion device.

The owner/operator shall ensure that copies of the results of the source testing along with related calculations and relevant process data are received by the Air District's Engineering Division and Source Test Section not more than 60 days following the date of the source test.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics, Regulation 2-2-302 Offsets, Regulation 1- 238 Parametric Monitor)

#### Contemporaneous *Onsite* Emissions Reduction Credits

19. Within 90 days after the startup of any equipment of the Rodeo Renewed Project, the owner of S-29, S-30, S-36, S-109, S-350, S-351, S-439, S-442, S-1002 and/or S-1003 shall submit a Device Data Update Form (Form DDU) to ensure all sources used for contemporaneous onsite emission reduction credits to offset emissions increases for this project are permanently shutdown and their permits surrendered. The owner/operator shall enter into the record log both dates when each of the unit was shut down and disconnected or dismantled.



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The final CERCs shall be based on the future shutdown date of each S-29, S-30, S-36, S-109, S-350, S-351, S-439, S-442, S-1002 and/or S-1003. The final CERCs will be adjusted based on the baseline period ending date (shutdown date) when the emission reduction becomes enforceable (when the owner/operator relinquishes the source's permit). The owner/operator shall provide any additional emission credits if the final CERCs are less than the required CERCs required in the Application 31157.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-221 and 2-2-302/303 Offsets, Regulation 2-2-231 Equivalence Credit, Regulation 2-2-603.3 Baseline period ending date)

20. Within 90 days of the completion of the installation/replacement of all fugitive components in Permit Condition #27658, Part 11, the owner/operator of S-350, S-1002 and/or S-1003 shall submit a final count of removed components by source associated with the Rodeo Renewed Project for contemporaneous onsite emission reduction credits to offset emissions increases for this project. A total of 2.605 tons per year of POC emissions have been credited for the removal of the following fugitive components:

- 2,216 valves
- 3,036 connectors
- 47 PSV's/PRV's
- 25 pumps
- 362 process drains

If the removed fugitive component counts exceed or are less than the component counts stated above, the contemporaneous onsite emission reduction credits shall be adjusted as needed, subject to APCO approval, to reflect contemporaneous onsite emission reduction credits from actual removed component counts based on the date that the emissions reduction becomes enforceable.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-221 and 2-2-302 Offsets, Regulation 2-2-231 Equivalence Credit)

21. The owner/operator of storage tanks S-111, S-112, S-113, S-135, S-137, S-173, S-340, and/or S-445 may continue to store but shall not load any organic petroleum materials after the startup of the first source (or any source) from the Rodeo Renewed Project. The Air District shall issue an exemption certificate for storage tanks S-111, S-112, S-113, S-135, S-137, S-173, S-340, and/or S-445 only after the owner/operator notifies the Engineering Division of the storage service change from the organic petroleum materials to exempt renewable feedstocks and/or renewable diesels.

The owner/operator of S-111, S-112, S-113, S-135, S-137, S-173, S-340, and/or S-445 shall submit a new application to the Air District for the New Source Review (NSR) and approval before the storage tank(s) S-111, S-112, S-113, S-135, S-137, S-173, S-340, and/or S-445 is/are being used in a non-exempt service.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-123.3.2 exemption, Reg 2-1-123.3.6 (storage of tallow or vegetable oils, Regulations 2-1-301/302))

22. The owner/operator of storage tanks S-97, S-110, S-114, S-174, S-175, S-261, S-334, S-360, S-448, S-449 and/or S-506 shall not load any organic petroleum materials after the startup of the first source (or any source) from the Rodeo Renewed Project. The Air District shall issue an exemption certificate for storage tanks S-97, S-110, S-114, S-174, S-175, S-261, S-334, S-360, S-448, S-449 and/or S-506 only after these tanks are cleaned and ready to store exempt renewable feedstocks and/or renewable diesel services. The owner/operator of these tanks shall notify the Engineering Division of the storage service change from the organic petroleum materials to exempt renewable feedstocks and/or renewable diesel before the Permit to Operate issuance of the first source (or any source) from the Rodeo Renewed Project.

The owner/operator of S-97, S-110, S-114, S-174, S-175, S-261, S-334, S-360, S-448, S-449 and/or S-506 shall submit a new application to the Air District for the New Source Review (NSR) and approval before



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the storage tank(s) S-97, S-110, S-114, S-174, S-175, S-261, S-334, S-360, S-448, S-449 and/or S-506 is/are being used in a non-exempt service.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-123.3.2 exemption, Reg 2-1-123.3.6 (storage of tallow or vegetable oils, Regulations 2-1-301/302)

***End of Conditions***



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**Source Nos. All Sources Facility-Wide**

**Condition No. 27810FW**

**Plant No. 21359**

**Application No. 31157**

## FACILITY-WIDE REQUIREMENTS

Amended by Application 31703 (2022), and Rodeo Renewed Project, Application 31157 (2022) – Delete exempt Sources S-110, S-111, S-112, S-113, S-114; shutdown S-29, S-30, S-351 upon startup.

### A. THROUGHPUT LIMITS

The following limits are imposed through this permit in accordance with Regulation 2-1-234.3. Sources require BOTH hourly/daily and annual throughput limits (except for tanks and similar liquid storage sources, and small manually operated sources such as cold cleaners which require only annual limits). Sources with previously imposed hourly/daily AND annual throughput limits are not listed below; the applicable limits are given in the specific permit conditions listed above in this section of the permit. Also, where hourly/daily capacities are listed in Table II-A, these are considered enforceable limits for sources that have a New Source Review permit. Throughput limits imposed in this section and hourly/daily capacities listed in Table II-A are not federally enforceable for grandfathered sources. Grandfathered sources are indicated with an asterisk in the source number column in the following table. Refer to Title V Standard Condition J for clarification of these limits.

In the absence of specific recordkeeping requirements imposed as permit conditions, monthly throughput records shall be maintained for each source.

source number	hourly / daily throughput limit	annual throughput limit (any consecutive 12-month period unless otherwise specified)
15	Table II-A	19.9 E 6 therm total at S15 through S19
16	Table II-A	19.9 E 6 therm total at S15 through S19
17	Table II-A	19.9 E 6 therm total at S15 through S19
18	Table II-A	19.9 E 6 therm total at S15 through S19
19	Table II-A	19.9 E 6 therm total at S15 through S19
20	Table II-A	1.9 E 6 therm
21	Table II-A	0.7 E 6 therm
22	Table II-A	2.6 E 6 therm
31	Table II-A	1.7 E 6 therm
43	Table II-A	19.1 E 6 therm
44	Table II-A	3.8 E 6 therm
*100	NA for tank	4.38 E 6 bbl
101	NA for tank	3.68 E 9 gal
102	NA for tank	3.68 E 9 gal
106	NA for tank	3.68 E 9 gal
*107	NA for tank	8.76 E 6 bbl
*110 superseded by Condition 27646 Part 22		
*111 superseded by Condition 27646 Part 21		



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source number	hourly / daily throughput limit	annual throughput limit (any consecutive 12-month period unless otherwise specified)
*112 superseded by Condition 27646 Part 21		
*113 superseded by Condition 27646 Part 21		
*114 superseded by Condition 27646 Part 22		
*115	NA for tank	4.38 E 6 bbl
*125 superseded by Condition 27787		
129	NA for tank	4.6 E 6 bbl
133	NA for tank	8.76 E 5 bbl
*134	NA for tank	1.31 E 7 bbl
150 superseded by Condition 27661		
151	NA for tank	4.38 E 7 bbl
*177	NA for tank	2.63 E 7 bbl
178	NA for tank	3.50 E 7 bbl
183	NA for tank	4.38 E 5 bbl
184	NA for tank	4.38 E 6 bbl
*194	NA for tank	100 bbl
195 Superseded by Condition 27653		
*216	NA for tank	4.6 E 6 bbl
*239	NA for tank	8.76 E 6 bbl
*254 superseded by Condition 27657		
*255	NA for tank	7.01 E 7 bbl
*256 superseded by Condition 27657		
*257 superseded by Condition 27657		
*258	NA for tank	7.01 E 7 bbl
*259	NA for tank	7.01 E 7 bbl
294	20 gpm	400,000 gallons
305	28,000 bbl/day	10.22 E 6 bbl
306	Table II-A	7.67E6 bbl
*319	Table II-A	3.51 E 6 bbl
324	Table II-A	3.68 E 9 gallons
336	Table II-A	9.2 E 6 therm
337	Table II-A	2.8 E 6 therm
*338 superseded by Condition 27657		
343	NA for tank	4.38 E 7 bbl





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source number	hourly / daily throughput limit	annual throughput limit (any consecutive 12-month period unless otherwise specified)
360 superseded by 27646, Part 22		
370	Condition 12121	4.03 E6 bbl
371	Table II-A	4.8 E6 therm for S371/S372
372	Table II-A	4.8 E6 therm for S371/S372
380	0.45 ton/hr	3,942 ton
381	420,000 gal/hr	3.68 E 9 gal
382	420,000 gal/hr	3.68 E 9 gal
383	420,000 gal/hr	3.68 E 9 gal
384	420,000 gal/hr	3.68 E 9 gal
385	Table II-A	3.68 E 9 gal
386	3600 gal/hr	3.2 E 7 gal
387	Table II-A	13.14 E 6 gal
390	N/A for tank	7.884 E 6 gal
392	N/A for tank	7.884 E 6 gal
400	N/A for sump	3.68 E 9 gal
401	N/A for sump	3.68 E 9 gal
435	Table II-A	6.6 E 6 bbl
436	Table II-A	4.7 E 6 bbl
437	Table II-A	10.4E 9 ft3
462	Table II-A	1.533 E 9 ft3
463	Table II-A	365,000 bbl
1007	Table II-A	3.68 E 9 gal

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-403 Permit Conditions)

#### **B. OTHER REQUIREMENTS**

1. The owner/operator shall notify the District in writing by fax or email no less than three calendar days in advance of any scheduled startup or shutdown of any process unit, and, for any unscheduled startup or shutdown of a process unit, within 48 hours or within the next normal business day. The notification shall be sent in writing by fax or email to the Director of Enforcement and Compliance. This requirement is not federally enforceable. [Regulation 2-1-403]

*End of Conditions*



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**Source Nos. S-324, S-381, S-382, S-383, S-384, S-385, S-386, S-387, S-390, S-400, S-401, S-1007, S-1008, & S-1009**

**Condition No. 1440**

**Plant No. 21359**

**Application No. 31157**

CONDITIONS FOR S324, S381, S382, S383, S384, S385, S386, S387, S390, S392, S400, S401, S1007, S1008, S1009

This condition was amended by Applications 483 in 1988, 10623 in 2005, 13424 in 2007, 13727 in 2009, 21295 in 2010, and 29933 in 2019.

1. S324 API Separator shall be operated such that the liquid in the main separator basin is in full contact with the fixed concrete roof. This condition shall not apply during separator shutdown for maintenance or when S-324 is abated by an oxidizer. [Cumulative Increase]
2. Diversions of refinery wastewater around the Water Effluent Treating Facility to the open Storm Water Basins (S1008, S1009) shall be minimized. These diversions shall not cause a nuisance as defined in District Regulation 7 or Regulation 1-301. [Cumulative Increase]
3. Records shall be maintained of each incident in which refinery wastewater is diverted to the open storm water basins. These records shall include the reason for the diversion, the total quantity of wastewater diverted to the basins, and the approximate hydrocarbon content of the water. [Cumulative Increase]
4. The sources below shall conduct monthly leak inspections in accordance with Regulation 8-8-603. After three consecutive inspections with no leaks detected that are not vapor-tight, inspections will be conducted quarterly for that source. If any leak is detected that is not vapor-tight during an inspection, then monthly inspections must be completed until there are three consecutive inspections without any leaks that are not vapor-tight. Any leak found by the owner/operator or BAAQMD that is not vapor-tight must be minimized within 24 hours and repaired within 7 days. Vapor-tight is defined in Regulation 8, Rule 8.
  - a. Doors, hatches, covers, and other openings on the S324 API Separator, forebay, outlet basin, and channel to the S1007 DAF Unit.
  - b. Doors, hatches, covers, and other openings on the S1007 DAF Unit and the S400 Wet and S401 Dry Weather Sumps, except for the vent opening on S-400 and S-401.
  - c. Any open process vessel, distribution box, tank, or other equipment downstream of the S1007 DAF Unit (S381, S382, S383, S384, S385, S386, S387, S390, S392).[Cumulative Increase]
5. Records shall be kept of each inspection in Part 4 and shall be made available to District personnel upon request. [Cumulative Increase]
6. The maximum wastewater throughput at the S324 API Separator and S1007 DAF Unit shall not exceed 7,500 gpm during media filter backwash and 7,000 gpm during all other times for each unit. Any modifications to equipment at this facility that increase the annual average waste water throughput at S324 and S1007 shall first be submitted to the BAAQMD in the form of a permit application. [Cumulative Increase]
7. This part will apply after VOC emissions at S1007 must be reduced to provide offsets for Application 13424 per Condition 22970, Part B. The owner/operator shall ensure that S1007, DAF, is controlled by A49, DAF Thermal Oxidizer, A51, DAF Carbon Bed, or A53, Thermal Oxidizer at all times of operation of S1007, except for up to 175 hours per any consecutive 12-month period for startup, shutdown, or maintenance. [Offsets]



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-324, S-381, S-382, S-383, S-384, S-385, S-386, S-387, S-390, S-400, S-401, S-1007, S-1008, & S-1009**

**Condition No. 1440**

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- a. Through source testing as described in Part 7(b) and 7(c), the owner/operator must demonstrate that the total reduction of emissions through use of A49, DAF Thermal Oxidizer and/or A51, DAF Carbon Bed will result in a total reduction of 44 tons POC per year, considering that abatement will not occur with either abatement device up to 175 hours per year. If initial testing does not demonstrate total reduction of 44 tons POC per year, the owner/operator may choose to:
  - i. In the case of A49, DAF Thermal Oxidizer, perform 4 tests in one year and average the results. In this case, the tests will be performed no less than 2 months apart and no more than 4 months apart.
  - ii. In the case of A51, DAF Carbon Bed, average the results of one year's worth of monitoring. If, after further testing, a total of 44 tons worth of POC reduction is not demonstrated, the owner/operator will supply offsets necessary to ensure a total reduction of 44 tons per year POC pursuant to BAAQMD Regulation 2-2-302.  
[Offsets, CEQA]
- b. The following conditions apply to operation of A49, DAF Thermal Oxidizer:
  - i. Within 90 days of the startup date of A49, DAF Thermal Oxidizer, the owner/operator shall perform a source test to determine the following:
    1. Mass emissions rate for POC that is collected and sent to A49.
    2. Mass emissions rate for POC after abatement by A49.
    3. Mass emissions rate for H<sub>2</sub>S that is collected and sent to A49.
    4. Mass emissions rate for H<sub>2</sub>S after abatement by A49.
    5. Mass emissions rate for SO<sub>2</sub>

During the source test, the owner/operator shall determine the temperature required to achieve 98.0% destruction by weight of POC or a concentration of 10 ppmv POC at the outlet. The temperature shall become an enforceable limit.

For the purposes of determining the amount of POC controlled, the owner/operator shall use District Method ST-7, Organic Compounds. The owner/operator shall submit the source test results to the District Source Test Manager, the District Permit Evaluation Manager, and the District Director of Compliance and Enforcement no later than 60 days after any source test.

[Offsets, CEQA]

- ii. After the initial source test required in Part 8 of this condition, the minimum temperature for A49 shall be 1445 degrees F. A49 shall not be operated below the minimum temperature except during an "Allowable Temperature Excursion" as defined below:
  1. Operation of A49 within 20°F below the minimum temperature
  2. Operation of A49 more than 20°F below the minimum temperature for a period or periods which, when combined are less than or equal to 15 minutes in any hour; or
  3. Operation of A49 more than 20°F below the minimum temperature for a period or periods which when combined are more than 15 minutes in any hour, provided that all three of the following criteria are met:
    - a. The excursion does not exceed 50°F below the minimum temperature;
    - b. The duration of the excursion does not exceed 24 hours; and
    - c. The total number of such excursions does not exceed 12 per calendar year (or any consecutive 12 month period).

Two or more excursions greater than 15 minutes in duration occurring during the same 24-hour period shall be counted as one excursion toward the 12 excursion limit. For each such excursion, sufficient records shall be kept to demonstrate that they meet the qualifying criteria described above. Records shall include at least the following information:

1. Temperature controller setpoint;



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**Source Nos. S-324, S-381, S-382, S-383, S-384, S-385, S-386, S-387, S-390, S-400, S-401, S-1007, S-1008, & S-1009**

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2. Starting date and time, and duration of each Allowable Temperature Excursion;
  3. Measured temperature during each allowable Temperature Excursion;
  4. Number of Allowable Temperature Excursions per month, and total number for the current calendar year; and
  5. All strip charts or other temperature records.  
[Offsets, CEQA]
- iii. To determine compliance with the temperature limit in Part 9, A49, Thermal Oxidizer shall be equipped with a temperature measuring device capable of continuously measuring and recording the temperature in A49. The temperature device shall be installed and maintained in accordance with the manufacturer's recommendations, shall be ranged appropriately to measure the temperature limit determined, and shall have a minimum accuracy over the range of 1.0 percent of full-scale.  
[Offsets, CEQA]
- iv. Deleted Application 13427.
- v. The owner/operator shall perform a source test to determine emissions of SO<sub>2</sub> from A49, DAF Thermal Oxidizer using District Method ST-19A, Sulfur Dioxide, Continuous Sampling. The owner/operator shall submit the source test results to the District Source Test Manager, the District Permit Evaluation Manager and the District Director of Compliance and Enforcement no later than 60 days after any source test.  
[Offsets, CEQA]
- vi. If source test data per Part 7.b.v shows that the annual SO<sub>2</sub> emissions are greater than 1.2 tons per year, the owner/operator shall provide additional SO<sub>2</sub> offsets in accordance with BAAQMD Regulation 2-2-303.  
[Offsets, CEQA]
- c. The following conditions apply to A51, DAF Carbon Bed
- i. A51 shall consist of two or more activated carbon vessels arranged in series, with at least one carbon vessel in service except for up to 175 hours per any consecutive 12-month period for startup, shutdown, or maintenance.  
[Offsets, CEQA]
  - ii. Total emission reduction of A51 shall be demonstrated through use of an in-line flowmeter, and the results of monitoring per the conditions below.  
[Offsets]
  - iii. The owner/operator of A51 shall monitor with a photo-ionization detector (PID), flame-ionization detector (FID), or other method approved in writing by the Air Pollution Control Officer at the following locations:
    1. The stream prior to any carbon vessels
    2. At the inlet to the last carbon vessel in series
    3. At the outlet of the carbon vessel that is last in series prior to venting to atmosphere  
[Offsets]



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- iv. When using an FID to monitor breakthrough, readings may be taken with or without a carbon filter tip fitted on the FID probe. Concentrations measured with the carbon filter tip in place shall be considered methane for the purpose of these permit conditions.  
[Offsets]
- v. All breakthrough monitoring readings shall be recorded in a monitoring log each time they are taken. Readings shall be conducted on a daily basis initially, but after two months of daily collection, the owner/operator may propose for District review, based on actual measurements taken at the site during operation of the source, that the monitoring schedule be changed to weekly based on the demonstrated breakthrough rates of the carbon vessels. If the District Engineering Division does not disapprove of the proposed monitoring changes within 30 days, the owner/operator shall commence weekly monitoring.  
[Offsets]
- vi. The owner/operator shall utilize the activated carbon vessels in such a manner to ensure that the outlet stream to atmosphere contains below 10 ppm VOC or 98% reduction of VOC, whichever is greater.  
[Offsets]
- vii. The owner/operator of this source shall maintain the following records for each month of operation of A51:
  - 1. The hours and times of operation
  - 2. Each monitor reading or analysis result for the day of operation they are taken.
  - 3. The number of spent carbon beds removed from service.[Offsets]

8. Deleted Application 13427.

9. This part will apply after VOC emissions at S1007 must be reduced to provide offsets for Application 13424 per Condition 22970, Part B. The owner/operator shall seal the DAF outlet channel and downstream sumps by a solid cover with gaskets. Any vents installed on the covered channel shall be routed to the thermal oxidizer or an equivalent control as determined by the APCO. [Offsets, CEQA]

\*10. The owner/operator must control with a thermal oxidizer at least 90% of the time on a consecutive 12-month basis, unless owner/operator controls H<sub>2</sub>S with an equivalent control device as determined by the APCO. [CEQA]

**Alternate Operating Scenario for S1007**

11. During periods when A49, DAF Thermal Oxidizer, A51, DAF Carbon Bed, and A53, Thermal Oxidizer are not in operation and not abating S1007, the owner/operator shall comply with the following requirements:

- a. Affected facility wastes routed to the API or DAF shall be included in the facility TAB in accordance with 40 CFR 61, Subpart FF.
- b. The owner/operator shall comply with BAAQMD and SIP Regulations 8-8-307.2 in lieu of BAAQMD and SIP Regulations 8-8-307.1.
- c. S1007 shall not be subject to the closed vent and control device requirements in 40 CFR 61.349.
- d. The owner/operator shall comply with parts 4, 5, 7, and 9 of this condition during periods when A49, DAF Thermal Oxidizer, A51, DAF Carbon Bed, and A53, Thermal Oxidizer are not in operation and not abating S1007.



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This is considered an Alternate Operating Scenario in accordance with BAAQMD Regulation 2-6-409.7 and 40 CFR 70. The owner/operator shall keep a record in a contemporaneous log when a period of non-control at S1007 commences and when control of S1007 resumes. [40 CFR 61, Subpart FF, 40 CFR 70.6(a)(9), BAAQMD Regulation 2-6-409.7]

***End of Conditions***





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-296 & S-398**

**Condition No. 18255**

**Plant No. 21359**

**Application No. 31157**

FOR SOURCES S296 AND S398, FLARES

1. Deleted Application 12601.
2. Deleted Application 12601.
3. For the purposes of these conditions, a flaring event is defined as a flow rate of vent gas flared in any consecutive 15 minutes period that continuously exceeds 330 standard cubic feet per minute (scfm). If during a flaring event, the vent gas flow rate drops below 330 scfm and then increases above 330 scfm within 30 minutes, that shall still be considered a single flaring event, rather than two separate events. For each flaring event during daylight hours (between sunrise and sunset), the owner/operator shall inspect the flare within 15 minutes of determining the flaring event, and within 30 minutes of the last inspection thereafter, using video monitoring or visible inspection following the procedure described in Part 4. [Regulation 2-6-409.2]
4. The owner/operator shall use the following procedure for the initial inspection and each 30-minute inspection of a flaring event.
  - a. If the owner/operator can determine that there are no visible emissions using video monitoring, then no further monitoring is necessary for that particular inspection.
  - b. If the owner/operator cannot determine that there are no visible emissions using video monitoring, the owner/operator shall conduct a visual inspection outdoors using either:
    - i. EPA Reference Method 9; or
    - ii. Survey the flare by selecting a position that enables a clear view of the flare at least 15 feet, but not more than 0.25 miles, from the emission source, where the sun is not directly in the observer's eyes.
  - c. If a visible emission is observed, the owner/operator shall continue to monitor the flare for at least 3 minutes, or until there are no visible emissions, whichever is shorter.
  - d. The owner/operator shall repeat the inspection procedure for the duration of the flaring event, or until a violation is documented in accordance with Part 5. After a violation is documented, no further inspections are required until the beginning of a new calendar day. [Regulation 6-1-301, 2-1-403]
5. The owner/operator shall comply with one of the following requirements if visual inspection is used:
  - a. If EPA Method 9 is used, the owner/operator shall comply with Regulation 6-1-301 when operating the flare.
  - b. If the procedure of Part 4.b.ii is used, the owner/operator shall not operate a flare that has visible emissions for three consecutive minutes. [Regulation 2-6-403]
6. The owner/operator shall keep records of all flaring events, as defined in Part 3. The owner/operator shall include in the records the name of the person performing the visible emissions check, whether video monitoring or visual inspection (EPA Method 9 or visual inspection procedure of Part 4) was used, the results of each inspection, and whether any violation of this condition (using visual inspection procedure in Part 4) or Regulation 6-1-301 occurred (using EPA Method 9). [Regulation 2-6-501; 2-6-409.2]
7. Deleted Application 12601.
8. The owner/operator shall operate and maintain a flare gas recovery system to control continuous or routing combustion in the Refinery Main Flare (S296). Use of a flare gas recovery system on a flare obviates the need to continuously monitor and maintain records of hydrogen sulfide in the gas as



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otherwise required by 40 CFR 60.105(a)(4) and 60.7. [Consent Decree Case No. 05-0258, paragraph 139(a)]

9. Recognizing that periodic maintenance may be required for properly designed and operated flare gas recovery systems, Phillips 66 will take all reasonable measure to minimize emissions while such periodic maintenance is being performed. Nothing in this part shall exempt the source from compliance with other applicable State and Local requirements. [Consent Decree Case No. 05-0258, paragraph 148]
10. The flare gas recovery system may be temporarily bypassed in the event of an emergency or in order to ensure safe operation of refinery processes. Nothing in this part shall exempt the source from compliance with other applicable State and Local requirements. [Consent Decree Case No. 05-0258, paragraph 149]
11. Phillips 66 shall eliminate the routes of continuous or intermittent, routinely-generated fuel gases to the MP-30 Flare (S398) and operate the flare such that it receives only process upset gases, fuel gas released as a result of relief valve leakage or gases released due to other emergency malfunctions.

12. Acid Gas or Hydrocarbon Flaring Incident Root Cause Analyses

The facility shall investigate the cause of acid gas and hydrocarbon flaring incidents, take reasonable steps to correct the conditions that have caused or contributed to such flaring incidents, and minimize such flaring incidents.

For purposes of this specific part, acid gas flaring shall mean the continuous or intermittent combustion of acid gas and/or sour water stripper gas. Hydrocarbon flaring shall mean the continuous or intermittent combustion of refinery-generated gases, except for acid gas and/or sour water stripper gas and/or tail gas, that results in the emission of sulfur dioxide equal to, or greater than 500 pounds in a 24 hour period; provided, however, that if 500 pounds or more of sulfur dioxide have been emitted in a 24 hour period and flaring continues into subsequent, contiguous, non-overlapping 24 hour period(s), each period of which results in emissions equal to, or in excess of 500 pounds of sulfur dioxide, then only one flaring incident shall have occurred. Subsequent, contiguous, non-overlapping periods are measured from the initial commencement of flaring within the flaring incident.

The owner/operator shall take, as expeditiously as practicable, such interim and/or long-term corrective actions, if any, as are consistent with good engineering practice to minimize the likelihood of a recurrence of the root cause and all contributing causes of the flaring incident(s). For purposes of this specific condition, Root Cause shall mean the primary cause(s) of a flaring incident(s) as determined through a process of investigation. To the extent that a flaring incident has as its root cause the bypass of a flare gas recovery system for safety or maintenance, the owner/operator is only required to keep a record of the date, time and duration of the event. A single Root Cause analysis may be used for root causes that occur routinely. Where the owner/operator has previously analyzed hydrocarbon incidents related to startup and shutdown, it may refer to those analyses when evaluating later incidents. Records of such investigations and corrective actions shall be kept onsite and shall be made available to District staff upon request. [Consent Decree Case No. 05-0258, paragraphs 152, 167]

13. Tail Gas RCA

Tail gas flaring shall mean combustion of tail gas that either is: (i) combusted in a flare and results in 500 pounds or more of SO<sub>2</sub> emissions in any 24 hour period; or (ii) Combusted in a thermal incinerator and results in excess emissions of 500 pounds or more of SO<sub>2</sub> emissions in any 24 hour period. Only those time periods which are in excess of a SO<sub>2</sub> concentration of 250 ppm (rolling



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twelve-hour average) shall be used to determine the amount of excess SO<sub>2</sub> emissions from the incinerator; provided, however, that if 500 pounds or more of sulfur dioxide have been emitted in a 24 hour period and flaring continues into subsequent, contiguous, non-overlapping 24 hour period(s), each period of which results in emissions equal to, or in excess of 500 pounds of sulfur dioxide, then only one flaring incident shall have occurred. Subsequent, contiguous, non-overlapping periods are measured from the initial commencement of flaring within the flaring incident.

The owner/operator shall take, as expeditiously as practicable, such interim and/or long-term corrective actions, if any, as are consistent with good engineering practice to minimize the likelihood of a recurrence of the Root Cause and all contributing causes of the flaring incident(s). For purposes of this specific condition, Root Cause shall mean the primary cause(s) of a flaring incident(s) as determined through a process of investigation. To the extent that a flaring incident has as its root cause the bypass of a flare gas recovery system for safety or maintenance, the owner/operator is only required to keep a record of the date, time and duration of the event. A single Root Cause analysis may be used for root causes that occur routinely. Where the owner/operator has previously analyzed hydrocarbon incidents related to startup and shutdown, it may refer to those analyses when evaluating later incidents. Records of such investigations and corrective actions shall be kept onsite and shall be made available to District staff upon request. [Consent Decree Case No. 05-0258, paragraph 152]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-352, S-353, S-354, S-355, S-356, & S-357**

**Condition No. 18629**

**Plant No. 21359**

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Conditions for S352, S353, S354, S355, S356, S357

May 30, 1989 PSD Permit Amendments (first issued March 3, 1986)

Permit NSR 4-4-3 SFB 85-03

I. [Obsolete – Approval to Construct executed in a timely manner]

II. [Obsolete – Approval to Construct executed in a timely manner]

III. Facilities Operation

All equipment, facilities and systems installed or used to achieve compliance with the terms and conditions of this Approval to Construct/Modify shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions.

IV. Malfunction

The Regional Administrator shall be notified by telephone within two working days following any failure of air pollution control equipment, process equipment, or of any process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in Section IX of these conditions. In addition, the Regional Administrator shall be notified in writing within 15 days of any such failure. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under Section IX of these conditions, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations that such malfunction may cause.

V. Right to Entry

The Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local air pollution control agency, and/or their authorized representatives, upon presentation of credentials, shall be permitted:

- A. to enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this Approval to Construct/Modify; and
- B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Approval to Construct/Modify; and
- C. to inspect any equipment, operation, or method required in this Approval to Construct/Modify; and
- D. to sample emissions from this source.

VI. Transfer of Ownership

In the event of any changes in control or ownership of facilities to be constructed or modified, this Approval to Construct/Modify shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Approval to Construct/Modify and its conditions by letter, a copy of which shall be forwarded to the Regional Administrator and the State and local Air Pollution Control Agency.

VII. Severability

The provisions of this Approval to Construct/Modify are severable, and, if any provisions of this Approval to Construct/Modify ~~is~~are held invalid, the remainder of this Approval to Construct/Modify shall not be affected thereby.

VIII. Other Applicable Regulations



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-352, S-353, S-354, S-355, S-356, & S-357**

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The owner/operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of Parts 52, 60 and 61 and all other applicable Federal, State and local air quality regulations.

**IX. Special Conditions**

A. [Obsolete – Approval to Construct executed in a timely manner]

**B. Air Pollution Control Equipment**

The owner/operator shall install, continuously operate, and maintain the following air pollution controls to minimize emissions. Controls listed shall be fully operational upon startup of the proposed equipment.

1. Each gas turbine shall be equipped with steam injection for the control of NO<sub>x</sub> emissions.
2. Each gas turbine shall be equipped with a Selective Catalytic Reduction (SCR) system for the control of NO<sub>x</sub> emissions.

**D. Operating Limitations**

1. The gas turbines and Heat Recovery Steam Generator (HRG) burners shall be fired only on refinery fuel gas and natural gas
2. The firing rate of each gas turbine/HRG burner set shall not exceed 466 MMbtu/hr.
3. The total fuel firing rate of the Steam/Power Plant shall not exceed 1048 MMbtu/hr.
4. The owner/operator shall maintain records of the amount of fuel used in the gas turbines and the HRG Burners, hours of operation, sulfur content of the fuel, and the ratio of steam injected to fuel fired in each gas turbine, in a permanent form suitable for inspection. The record shall be retained for at least two years following the date of record and shall be made available to EPA upon request.

**E. Emission Limits for NO<sub>x</sub>**

On or after the date of startup, owner/operator shall not discharge from the gas turbine/HRG Burner sets NO<sub>x</sub> in excess of the more stringent of 83 lb/hr total or 25 ppmv at 15% O<sub>2</sub> (3-hour average), or 664 lb/day per set. The concentration limit shall not apply for 4 hours during startup or 2 hours during shutdown.

**F. Emission Limits for SO<sub>2</sub>**

On or after the date of startup, the owner/operator shall not discharge from the gas turbine/HRG Burner sets SO<sub>2</sub> in excess of 15.6 lb/hr per set or 44 lb/hr total (3-hour average). Additionally, total SO<sub>2</sub> emissions shall not exceed 34 lb/hr (3 hour average) for more than 36 days per year, and shall not exceed a total of 153 tons per year (365 days)

**G. Continuous Emission Monitoring**

1. Prior to the date of startup and thereafter, the owner/operator shall install, maintain and operate the following continuous monitoring systems downstream of each of the gas turbine/HRG Burner units:
  - a. Continuous monitoring systems to measure stack gas NO<sub>x</sub> and SO<sub>2</sub> concentrations. The systems shall meet EPA monitoring performance specifications (60.13 and 60, Appendix B, Performance Specifications). Alternatively, the SO<sub>2</sub> continuous monitor may be substituted for by a continuous monitoring system measuring H<sub>2</sub>S in the fuel gas system and daily sampling for total sulfur in the fuel gas.
  - b. A system to calculate the stack gas volumetric flow rates continuously from actual process variables.



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2. The owner/operator shall maintain a file of all measurements, including continuous monitoring system performance evaluations, all continuous monitoring system monitoring device calibration checks, adjustments and maintenance performed on these systems or devices, and all other information required by 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports and records.
3. The owner/operator shall submit a written report of SO<sub>2</sub> emission status and all excess emissions to EPA (Attn: A3-3) for every calendar quarter. The report shall include the following:
  - a. If fuel gas samples are used to determine SO<sub>2</sub> emissions:
    - (1) The total measured sulfur concentration in each fuel gas sample for the calendar quarter.
    - (2) The daily average sulfur content in the fuel gas, daily average SO<sub>2</sub> mass emission rate (lb/hr), and total tons per year of SO<sub>2</sub> emitted for the last 365 consecutive days. Total SO<sub>2</sub> emissions exceeding 34 lb/hr must be identified.
  - b. The magnitude of excess emissions computed in accordance with 60.13(h), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
  - c. Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the cogeneration gas turbine system. The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted shall also be reported.
  - d. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.
  - e. When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report.
  - f. Excess emissions shall be defined as any three-hour period during which the average emissions of NO<sub>x</sub> and/or SO<sub>2</sub> as measured by the continuous monitoring system and/or calculated from the daily average of the total sulfur in the fuel gas, exceeds the NO<sub>x</sub> and/or SO<sub>2</sub> maximum emission limits set for each of the pollutants in Conditions IX.E and IX.F. above
  - g. Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limits for the purpose of this permit.

**H. New Source Performance Standards**

The proposed cogeneration facility is subject to the Federal regulations entitled Standards of Performance for New Stationary Sources (60). The owner/operator shall meet all applicable requirements of Subparts A and GG of this regulation.

**X. Agency Notifications**

All correspondence as required by this Approval to Construct/Modify shall be forwarded to:

**A. Director, Air Management Division (Attn: A3-3)**

EPA Region 9  
215 Fremont Street  
San Francisco, CA 94105 (415/974-8034)

**B. Chief, Stationary Source Division**

California Air Resources Board  
P O Box 2815  
Sacramento, CA 95812

**C. Air Pollution Control Officer**





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Bay Area Air Quality Management District  
375 Beale Street, Suite 600,  
San Francisco, CA 94105

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-318**

**Condition No. 22549**

**Plant No. 21359**

**Application No. 31157**

Source 318, U76 Gasoline/Mid Barrel Blending Unit

1. The owner/operator shall ensure that the daily throughput of petroleum liquids, excluding diesel, at S318, U76 Gasoline/Mid Barrel Blending Unit, does not exceed 113,150 barrels/day. No daily limit is placed on diesel. [Cumulative Increase]
2. The owner/operator shall ensure that the throughput of petroleum liquids excluding diesel at S318 does not exceed 41,300,000 barrels/yr. [Cumulative increase]
3. The owner/operator shall keep daily records of throughput of all petroleum fluids at S318, U76 Gasoline/Mid Barrel Blending Unit, in a District-approved log. These records shall be kept for at least five years and shall be made available to the District upon request. [Cumulative Increase]
4. All pressure relief devices on the process unit shall be vented to a fuel gas recovery system, furnace, or flare with a recovery/destruction efficiency of 98%. [8-28-302, BACT]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-339**

**Condition No. 22968**

**Plant No. 21359**

**Application No. 31157**

Source S339, U80 Gasoline/Mid Barrel Blending

1. The owner/operator shall ensure that the throughput of S339 does not exceed 52,600,000 barrels over any rolling 12-month period.
2. The owner/operator shall keep throughput records for this source on a daily basis. The records shall be kept on site for a period of at least 5 years and shall be made available for inspection by District staff upon request. [Cumulative Increase]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-45, S-434 & S-1010**

**Condition No. 22970**

**Plant No. 21359**

**Application No. 31157**

**A. CFEP Project Mass Emission Limits**

1. Following are the sources that are subject to Condition 22970, parts A2, A4, and A.5:  
S45, Heater (U246 B-801 A/B)  
S434, U246 High Pressure Reactor Train (Cracking)  
S1010, U235 Sulfur Recovery Unit  
[Cumulative increase, PSD]
2. The owner/operator shall ensure that the annual emissions of the above sources do not exceed the following annual emission limits, including startup, shutdown, malfunction, and upset emissions.
  - a. NOx 13.5 tpy [Cumulative increase]
  - b. SO2 34.4 tpy [Cumulative increase]
  - c. PM10 2.9 tpy [Cumulative increase, PSD]
  - d. POC 1.9 tpy [Cumulative increase]
  - e. CO 40.72 tpy [Cumulative increase]
  - f. Sulfuric acid mist 6.01 tpy [PSD]
  - \*g. Ammonia 6.35 tpy [BAAQMD Regulation 2, Rule 5]
3. The owner/operator shall ensure that the daily emissions of the CFEP, including source S2 at Facility B7419, do not exceed the following daily emission limit, including startup, shutdown, malfunction, and upset emissions.
  - a. Sulfuric acid mist 38 lb/day [PSD]
4. The owner/operator shall determine whether the emissions are below the allowable emissions in Part A.2, as shown below. The owner/operator shall calculate and report the emissions of NOX, SO2, PM10, POC, CO, and sulfuric acid mist on an annual basis in the following manner.
  - a. For Source S45, Heater
    - i. Use the mass emissions data generated by the NOx CEM at S45.
    - ii. Use the emissions rates determined by semi-annual source tests for CO at S45.
    - iii. Use the emissions rates determined by initial source test for POC, PM10, and sulfuric acid mist at S45.
    - iv. \*Use the emissions rates determined by initial source test for ammonia at S45.
    - v. Use the sulfur analysis of fuel required by Condition 22862, part 11 at S45.  
[Cumulative increase, PSD, BAAQMD Regulation 2, Rule 5]
  - b. For Source S1010, Sulfur Recovery Unit
    - i. Use the mass emissions data generated by the SO2 and CO CEMs at S1010.
    - ii. Use the emissions rates determined by annual source tests for NOx and sulfuric acid mist at S1010.
    - iii. \*Use the emissions rates determined by annual source test for ammonia at S1010.
    - iv. Use the emissions rates determined by initial source test for POC and PM10 at S1010.  
[Cumulative increase, PSD, BAAQMD Regulation 2, Rule 5]
  - c. For the refinery flare S296
    - i. Calculate any emissions caused by venting the contents of any part of the sulfur recovery unit including S1010, A48, and A424 to the refinery flare.
    - ii. Calculate any emissions caused by venting the contents of any part of S434 to a refinery flare.
    - iii. The owner/operator shall calculate any emissions caused by venting the feed to Facility B7419, sources S1 or S2 to the refinery flare.  
[Cumulative increase, PSD, BAAQMD Regulation 2, Rule 5]
5. If the annual emissions, as determined in part 4, are above the allowable emissions in part A.2, the owner/operator shall supply additional offsets, where applicable, and perform additional analysis for PSD, if necessary. The results of the analysis shall be submitted to the Director of Compliance and Enforcement on an annual basis on the anniversary of the startup of S1010 or S434, whichever is earlier. [Offset, PSD]



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-45, S-434 & S-1010**

**Condition No. 22970**

**Plant No. 21359**

**Application No. 31157**

6. The annual emissions of the following sources shall not exceed 16.7 tons PM<sub>10</sub>/yr: S45, S434, and S1010 at Facility A0016, and S2 and S3 at Facility B7419. If the emissions exceed 16.7 tons per year, the owners/operators of Facilities A0016 and B7419 shall provide contemporaneous offsets of PM<sub>10</sub> that comply with BAAQMD Regulations 2-2-201 and 2-2-605. The owners/operators shall use the following data to calculate the annual PM<sub>10</sub> emissions:
- a. The emissions rate of PM<sub>10</sub> determined by the initial source tests at S45 and S1010 at Facility A0016
  - b. The emissions rate of PM<sub>10</sub> determined by the initial source test at S2 at Facility B7419
  - c. The emissions rate of PM<sub>10</sub> calculated for venting the contents of any part of S434 to a refinery flare
  - d. The emissions rate of PM<sub>10</sub> calculated for venting the contents of any part of S1010, A48, and A424 to a refinery flare
  - e. The emissions rate of PM<sub>10</sub> calculated for operation of S3, Hydrogen Plant Flare, at Facility B7419

The results of the analysis shall be submitted to the Director of Compliance and Enforcement on an annual basis on the anniversary of the startup of S1010 or S434 at Facility A0016 or S2 at Facility B7419, whichever is earlier. [1-104, 2-2-304]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-139 & S-140**

**Condition No. 23724**

**Plant No. 21359**

**Application No. 31157**

For Sources S135 (Tank 200), S137 (Tank 202), S139 (Tank 204), S140 (Tank 205), S168 (Tank 269), S173 (Tank 280), S174 (Tank 281), S175 (Tank 284), S182 (Tank 294), S360 (Tank 223), S445 (Tank 271), S449 (Tank 285), S506 (Tank 257), Tank 235, and Tank 236.

This condition was imposed by Application 13424 and amended by Application 16940 in January 2008, Application 13427 in 2009, Application 21706 in 2010, Application 26020 April 2014. Amended by Application 31703 to add daily, annual throughput and emissions (Parts 10 through 13), Application 31157 (2022).

1.
  - a. The owner/operator shall ensure that all sources subject to this permit condition are abated by A7, Vapor Recovery System at all times of operation except for the following sources, which shall be controlled according to the schedule below. The owner/operator shall ensure A7, Vapor Recovery System, shall have at least an overall 98% system control efficiency:  
S168  
S173  
S174  
S506  
S168 shall be abated by A7 and subject to the terms of this condition prior to the startup of S434. S173 and S174 shall be abated when blanketing is required to preserve product or feed. S506 shall be abated by A7 and subject to the terms of this condition upon the date of startup. [Basis: Regulation 2-1-403, Regulation 1-107]
  - b. The owner/operator shall ensure that a fourth compressor is added to A7, Odor Abatement System, before more than two of the following sources are controlled by A7: S168, S173, S174, S175, S506. [Basis: Regulation 2-1-301, 2-1-305, 2-1-403, CEQA]
  - c. The new odor abatement compressor, or a dedicated compressor, shall be designed and installed to supplement G-503, Flare Gas Recovery Compressor. [CEQA]
2. The owner/operator shall ensure that all tanks subject to this permit condition are blanketed by utility-grade natural gas. [Basis: Regulation 2-1-403]
3. By July 5, 2009, the owner/operator shall equip all tanks subject to this permit condition except S506 with District-approved pressure monitoring devices. Upon startup, the owner/operator shall equip S506 with a District-approved pressure-monitoring device. [Basis: Regulation 2-1-403]
4. After the pressure monitoring devices are installed, the owner/operator shall ensure that tanks listed below operate at all times below their respective minimum set pressures, as shown in 4a and 4b of this condition. Any recorded pressure in excess of the minimum pressure shall be reported to the District's Compliance and Enforcement and Engineering Divisions within 10 days of the pressure excess. The owner/operator must conduct an investigation of the incident to determine if the pressure excess resulted in the pressure/vacuum (PV) valve lifting to atmosphere and if so, why there was a pressure excess that resulted in the PV valve lifting to atmosphere. Results of the investigation must be reported to the District's Compliance and Enforcement and Engineering Divisions within 30 days of the initial report. Any recorded pressure in excess of the minimum set pressure shall be considered an indication of a valve lift to atmosphere unless a District approved tell-tale indicator on the PV valve shows that the valve did not lift, or the owner/operator demonstrates to the satisfaction of the APCO that the recorded pressure excess was the result of a monitoring, recording or other malfunction. The minimum set pressure for each storage tank, except S139, S140, S182, S360, S445, S449, must be submitted in a report to the District's Compliance and Enforcement and Engineering Divisions within 21 months of issuance of the Authority to Construct.
  - a. Source Number Minimum Set Pressure (inches H2O)

. 135	1.7
. 137	1.7





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-139 & S-140**

**Condition No. 23724**

**Plant No. 21359**

**Application No. 31157**

. 139	1.9
. 140	1.9
. 168	1.8
. 182	1.8
. 360	1.9
. 445	1.9
. 449	1.5
. 506	2.2

The owner/operator shall submit an accelerated permit application to include any change to any of the pressures above. Any amendment to the Title V permit to include the pressures above shall be submitted as a minor revision to the Title V permit. [Basis: Regulation 8, Rule 5]

b. Source Number Minimum Set Pressure (inches H<sub>2</sub>O)

. 173	1.8
. 174	1.8
. 175	1.3
. Tank 235	2.2
. Tank 236	2.2

The owner/operator shall submit an accelerated permit application to include any change to any of the pressures above. Any amendment to the Title V permit to include the pressures above shall be submitted as a minor revision to the Title V permit. [Basis: Regulation 2-1-403]

5. The owner/operator shall ensure that each pressure relief valve for each tank must be set at or above its nominal set pressure listed in Part 4 of this permit condition. [Basis: Regulation 2-1-403]

6. Corrective Plan:

The corrective plan is a means for ConocoPhillips to correct occasional exceedances, to stay within the working pressure limits and thus to remain in compliance with District Regulations. If a PV valve has been determined to have lifted three times in a 12 month period, ConocoPhillips shall implement abatement measures to prevent the recurrence of the type of incident which caused the valve to lift. This plan is intended to provide a mechanism for bringing ConocoPhillips back into compliance should a temporary exceedance occur. This plan does not constitute an alternative means of compliance. [Basis: Regulation 2-1-403]

- a. If, during any consecutive 12-month period, more than three instances of a PV valve release to atmosphere attributed to a storage tank subject to this permit condition are reported, ConocoPhillips shall propose a method to correct the exceedance and to ensure compliance with District regulations and permit conditions. The proposed method is subject to approval by the Air Pollution Control Officer. Potential methods include but are not limited to increasing the nominal set pressure of the pressure/vacuum valve, bladder tank(s) for additional short-term vapor storage capacity, dedicated vapor recovery flare, pilot control on pressure relief valves, flow meters on vapor recovery tanks to monitor blanket gas flows, replacement of tanks, and naphtha degassers. [Basis: Regulation 2-1-403]

7. To determine compliance with the above conditions, the owner/operator shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including, but not necessarily limited to the following information:

- a. Pressure measurements from tanks listed in part 4 of this condition. Pressure shall be recorded at least for one-minute interval for each tank, except as allowed in BAAQMD Regulation 1-523 for parametric monitors. The owner/operator shall maintain a reasonable stock of spare parts for the components of the monitoring system to ensure that repairs are completed as quickly as possible.



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-139 & S-140**

**Condition No. 23724**

**Plant No. 21359**

**Application No. 31157**

All records shall be retained on site for five years, from the date of entry and made available for inspection by the District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District regulation. [Basis: Regulation 2-1-403]

8. The requirement to report pressures in excess of the minimum pressure as described in part 4 of this permit condition, shall start on July 5, 2009 for all tanks in this condition except S139, S140, S182, S360, S445, S449. The requirement to report pressures in excess of the minimum pressure as described in part 4 of this permit condition, shall start on January 5, 2008 for the following tanks: S139, S140, S182, S360, S445, S449. [Basis: 2-1-403]
9. The permit to operate is contingent upon compliance with Regulation 1-301, Standard for Public Nuisance, and Regulation 7, Odorous Substances. Upon receipt of a violation for either of these regulations, the Air Pollution Control Officer may require the owner/operator to install additional emission control measures as stated in Part 6 of this permit condition. [Basis: Regulations 1-301, 7-301, 7-302]
10. Deleted. S-360 is exempt from permit during P66 Rodeo Renewed Project upon initial startup under Application 31157.
11. Deleted. S-360 is exempt from permit during P66 Rodeo Renewed Project upon initial startup under Application 31157.
12. Deleted. S-506 is exempt from permit during P66 Rodeo Renewed Project upon initial startup under Application 31157.
13. Deleted. S-506 is exempt from permit during P66 Rodeo Renewed Project upon initial startup under Application 31157.
14. Deleted. S-360 and S-506 are exempt from permit during P66 Rodeo Renewed Project upon initial startup under Application 31157.
15. Deleted. S-360 and S-506 are exempt from permit during P66 Rodeo Renewed Project upon initial startup under Application 31157.

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-324**

**Condition No. 26069**

**Plant No. 21359**

**Application No. 31157**

For Source S-324 (Oil/Water Separator)

1. The owner/operator shall not allow emissions from A-53 to exceed the following emission limits: NO<sub>x</sub> 0.64 lb/hour, CO 1.7 lb/hour. The owner/operator shall operate A-53 to meet the following VOC destruction efficiency requirements:
  - a. A-53 outlet VOC concentration of 10 ppmv or less; or
  - b. All of the following standards depending on the applicable A-53 inlet VOC concentration:
  - c. VOC destruction efficiency  $\geq 98.5\%$  if A-53 inlet VOC concentration  $> 2,000$  ppmv;
  - d. VOC destruction efficiency  $\geq 97\%$  if A-53 inlet VOC concentration  $\leq 2,000$  ppmv;(basis: Cumulative Increase, Regulation 8-8-302.3)
2. The owner/operator shall operate A-53 to be at least 1400 degrees F. The District may adjust this minimum temperature, if source test data demonstrates that an alternate temperature is necessary for or capable of maintaining compliance with Part 2 above. (basis: Cumulative Increase)
3. The temperature limit in Part shall not apply during an "Allowable Temperature Excursion", provided that the temperature controller setpoint complies with the temperature limit. An Allowable Temperature Excursion is one of the following:
  - a. A temperature excursion not exceeding 20 degrees F; or
  - b. A temperature excursion for a period or periods which when combined are less than or equal to 15 minutes in any hour; or
  - c. A temperature excursion for a period or periods which when combined are more than 15 minutes in any hour, provided that all three of the following criteria are met.
    - i. the excursion does not exceed 50 degrees F;
    - ii. the duration of the excursion does not exceed 24 hours; and
    - iii. the total number of such excursions does not exceed 12 per calendar year (or any consecutive 12 month period). Two or more excursions greater than 15 minutes in duration occurring during the same 24-hour period shall be counted as one excursion toward the 12-excursion limit. (basis: Regulation 2-1-403)
4. For each Allowable Temperature Excursion that exceeds 20 degrees F and 15 minutes in duration, the Permit Holder shall keep sufficient records to demonstrate that they meet the qualifying criteria described above. Records shall be retained for a minimum of five years from the date of entry, and shall be made available to the District upon request. Records shall include at least the following information:
  - a. Temperature controller setpoint;
  - b. Starting date and time, and duration of each Allowable Temperature Excursion;
  - c. Measured temperature during each Allowable Temperature Excursion;
  - d. Number of Allowable Temperature Excursions per month, and total number for the current calendar year; and
  - e. All strip charts or other temperature records.(basis: Regulation 2-1-403)
5. To determine compliance with the temperature requirement in these permit conditions, the owner/operator of A-53 shall be equipped with a temperature measuring device capable of continuously measuring and recording the temperature in A-53. The owner/operator shall install, and maintain in accordance with manufacturer's recommendations, a temperature measuring device that meets the following criteria: the minimum and maximum measurable temperatures with the device are 200 degrees F and 1900 degrees F, respectively, and the minimum accuracy of the device over this temperature range shall be 1.0 percent of full-scale. (basis: Cumulative Increase)



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-324**

**Condition No. 26069**

**Plant No. 21359**

**Application No. 31157**

6. Within 90 days of startup of A-53, the owner/operator shall conduct District approved source tests to determine initial compliance with the limits in part 2. The owner/operator shall submit the source test results to the District staff no later than 60 days after the source test. (basis: Cumulative Increase)
7. The owner/operator shall obtain approval for all source test procedures from the District's Source Test Section prior to conducting any tests. The owner/operator shall comply with all applicable testing requirements as specified in Volume V of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test Section, in writing, of the source test protocols and projected test dates at least 7 days prior to testing.  
(basis: Cumulative Increase)
8. The owner/operator of A-53 shall maintain records of hours of operation, oxidizer temperature, and source test results in a District approved log for at least 5 years from the date of entry. These records shall be made available to District staff upon request. (basis: Cumulative Increase, Recordkeeping)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-307, S-309 & S-434**

**Condition No. 27647**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance): Phillips 66 Rodeo Renewed Project.

S-307 U240 Unicracking Unit

S-434 U246 High Pressure Reactor Train

S-460 U250 Ultra Low Sulfur Diesel Hydrotreater

S-309 U248 Unisar Unit

1. The owner/operator of S-307, S-434 and/or S-460 combined shall not produce more than 67,000 barrels of renewable fuels per day based on a consecutive rolling 12-month period. (Basis: Regulation 2-2-208 Cumulative Increase, CEQA)
2. The owner/operator shall ensure that the combined renewable feedstock throughput of U240 Unicracking Unit (S-307) and U246 High Pressure Reactor Train (S-434) does not exceed 69,000 barrels per calendar day.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-403)
3. The owner/operator shall ensure that the renewable feedstock throughput of U240 Unicracking Unit (S-307) does not exceed 42,000 barrels per calendar day and/or 15,330,000 barrels in any consecutive 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
4. The owner/operator shall ensure that the renewable feedstock throughput of U246 High Pressure Reactor Train (S-434) does not exceed 30,000 barrels per calendar day and/or 9,855,000 barrels in any consecutive 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
5. The owner/operator of U248 Unisar Unit (S-309) shall ensure that the renewable Jet throughput does not exceed 16,740 barrels per calendar day and/or 6,110,100 barrels over any consecutive rolling 12-month period (Basis: Regulation 2-2-208 Cumulative Increase)
6. The owner/operator of all pressure relief devices at S-307 and S-434 shall vent the emissions to a fuel gas recovery system, furnace, or flare with a recovery/destruction efficiency of at least 98% by weight. [8-28-302, BACT]
7. To determine compliance with the above condition(s), the owner/operator shall maintain the following records and provide all of the data necessary to evaluate compliance with the above conditions, including, but not necessarily limited to, the following information:
  - a. On a daily basis, type and amount of renewable feedstock and products processed at each and combined sources (S-307, S-434 and S-460) and amount of feedstock and renewable Jet and other renewable products processed at S-309. The daily amounts of materials shall be totaled on both a monthly and consecutive 12-month period basis.

These records shall be kept on-site for at least 5 years. All records shall be recorded in an Air District approved log and made available for inspection by Air District staff upon request. These recordkeeping Requirements shall not replace the recordkeeping Requirements contained in any applicable Air District Regulations.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 1-441)

### ***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-599, S-1010, A-598, A-599, A-600, & A-601**

**Condition No. 27648**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance): Phillips 66 Rodeo Renewed Project.  
S-599 Sour Water Strippers and Amine Treatment System abated by

U237 Sulfur Treatment Unit (STU-2 trains) consisting of

- A-598 Thermal Oxidizer and A-599 SO<sub>2</sub> Scrubber; and/or
- A-600 Thermal Oxidizer and A-601 SO<sub>2</sub> Scrubber; or

S-1010 SRU Unit 235 (backup unit during emergencies only)

1. The owner/operator shall abate S-599 Amine system and Sour Water Strippers with the properly maintained and properly operated per manufacturer's specifications A-598 Thermal Oxidizer/A-599 SO<sub>2</sub> Scrubber, and/or A-600 Thermal Oxidizer/A-601 SO<sub>2</sub> Scrubber and/or Sulfur Plant Unit 235 (S-1010) at all times. S-1010 shall be used only during planned and unplanned outages of Unit 237 Sulfur Treatment Unit. The planned outage or maintenance is expected to be performed once every three years. The unplanned outages apply only to emergencies.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-5)
2. The owner/operator of A-598 and/or A-600 thermal oxidizers shall each not exceed 7.4 MMBtu/hr of natural gas, and/or 64,824 MMBtu during any consecutive rolling 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase, BACT)
3. The owner/operator of A-599 and/or A-601 shall each not exceed a maximum flowrate of 3,070 DSCFM. The owner/operator of A-599 and/or A-601 shall install, maintain and operate an Air District's approved continuous flow meter on each of the scrubber's exhaust (A-599 and/or A-601).  
(Basis: Regulation 2-2-208 Cumulative Increase, BACT)
4. The owner/operator of A-599 and/or A-601 shall each not exceed
  - a. 150 ppmvd of NO<sub>x</sub> at 3% O<sub>2</sub> (averaged on 1-hour basis) or 0.24 lb/MMBtu
  - b. 90 ppmvd of CO at 3% O<sub>2</sub> (averaged on 1-hour basis) or 0.09 lb/MMBtu
  - c. 50 ppmvd of SO<sub>2</sub> at 3% O<sub>2</sub> (averaged on 1-hour basis) or 0.11 lb/MMBtu
  - d. 3 ppmvd of TOC at 3% O<sub>2</sub> (averaged on 1-hour basis) or 0.0045 lb/MMBtu
  - e. 10 ppmvd of Ammonia at 3% O<sub>2</sub> (averaged on 1-hour basis)
  - f. 2.14 ppmvd of H<sub>2</sub>S at 3% O<sub>2</sub> (averaged on 1-hour basis)
  - g. 167 ppmvd of Sulfuric Acid Mist at 3% O<sub>2</sub> (averaged on 1-hour basis)
  - h. The daily PTE limit for each pollutant shall be calculated based on the maximum firing rate in Part 2 multiplied by the emission factors above (Parts 4a through 4d) or on the concentrations (Parts 4e through 4g) and flow rate in Part 3, based on 24 hours per day of operation

For the purpose of these conditions TOC shall be considered equal to POC and equal to NMOC

(Basis: Regulation 2-2-208 Cumulative Increase, RACT for NO<sub>x</sub> and CO)

5. The owner/operator of each A-599 and/or A-601 shall not exceed any of the following hourly limits from S-599:
  - a. PM<sub>10</sub>/PM<sub>2.5</sub> = Sulfuric acid mist: 0.73 lb/hr for a single stack; and/or 0.95 lb/hr for both stacks combined
  - b. H<sub>2</sub>S: 0.041 lb/hr for a single stack; and/or 0.081 lb/hr for both stacks combined
  - c. NH<sub>3</sub>: 0.095 lb/hr for a single stack; and/or 0.19 lb/hr for both stacks combined
  - d. NO<sub>x</sub>: 1.76 lb/hr for a single stack; and/or 3.5 lb/hr for both stacks combined
  - e. CO: 0.64 lb/hr for a single stack; and/or 1.3 lb/hr for both stacks combined
  - f. TOC: 0.033 lb/hr for a single stack; and/or 0.07 lb/hr for both stacks combined
  - g. SO<sub>2</sub>: 0.81 lb/hr for a single stack; and/or 1.6 lb/hr for both stacks combined

For the purpose of these conditions TOC shall be considered equal to POC and equal to NMOC

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-5)





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-599, S-1010, A-598, A-599, A-600, & A-601**

**Condition No. 27648**

**Plant No. 21359**

**Application No. 31157**

6. The owner/operator shall ensure that the total emissions, including startups, shutdowns, planned and unplanned outages (as defined in Part 1), and/or malfunctions, from each A-599 and/or A-601, do not exceed any of the following limits per any consecutive rolling 12-month period:
- a. SO<sub>2</sub>: 3.5 tons [Cumulative Increase, BACT]
  - b. NO<sub>x</sub>: 7.7 tons [RACT, Cumulative Increase]
  - c. CO: 2.8 tons [Cumulative Increase, RACT]
  - d. TOC: 0.15 tons (calculate as propane) [Cumulative Increase]
  - e. PM<sub>10</sub>: 3.2 tons [Cumulative Increase, BACT]
  - f. PM<sub>2.5</sub>: 3.2 tons [Cumulative Increase, BACT]
  - g. Sulfuric acid mist: 3.2 tons [Regulation 2, Rule 5]
  - h. H<sub>2</sub>S: 0.178 tons [Regulation 2, Rule 5]
  - i. NH<sub>3</sub>: 0.415 tons [Regulation 2, Rule 5]

For the purpose of these conditions TOC shall be considered equal to POC and equal to NMOC

7. The owner/operator shall ensure that the total emissions, including startups, shutdowns, planned and unplanned outages (as defined in Part 1), and/or malfunctions, from A-599 and A-601 combined, do not exceed any of the following limits per any consecutive rolling 12-month period:
- a. SO<sub>2</sub>: 4.6 tons [Cumulative Increase, Offsets]
  - b. NO<sub>x</sub>: 10 tons for all A-599, A-601 and/or S-1010 (SRU Unit 235) combined [RACT, Cumulative Increase, Offsets]
  - c. CO: 3.6 tons [Cumulative Increase]
  - d. TOC: 0.19 tons (calculate as propane) [Cumulative Increase, Offsets]
  - e. PM<sub>10</sub>: 4.16 tons [Cumulative Increase, Offsets]
  - f. PM<sub>2.5</sub>: 4.16 tons [Cumulative Increase, Offsets]
  - g. Sulfuric acid mist: 4.16 tons [Regulation 2, Rule 5]
  - h. H<sub>2</sub>S: 0.356 tons [Regulation 2, Rule 5]
  - i. NH<sub>3</sub>: 0.829 tons [Regulation 2, Rule 5]

For the purpose of these conditions TOC shall be considered equal to POC and equal to NMOC

8. The owner/operator shall properly operate A-598 and/or A-600 to be at least 2,100 degrees F at the first furnace (Reduction furnace) before abating S-599. The Air District may adjust this minimum temperature, if source test data demonstrates that an alternate temperature is necessary for or capable of maintaining compliance with Parts 4, 5, 6 and 7 above.  
(Basis: Regulation 2-2-208 Cumulative Increase)

9. To determine compliance with the temperature requirement in these permit conditions, the owner/operator shall equip each A-598 and/or A-600 with a temperature measuring device capable of continuously measuring and recording the temperature in each A-598 and/or A-600. The owner/operator shall properly install, properly operate, and properly maintain in accordance with manufacturer's recommendations, a temperature measuring device that meets the following criteria: the minimum and maximum measurable temperatures with the device are 700 degrees F and 3,700 degrees F, respectively, and the minimum accuracy of the device over this temperature range shall be 1.0 percent of full-scale.  
(Basis: Regulation 2-2-208 Cumulative Increase)

10. The owner/operator of A-598 and/or A-600 shall not be subject to the temperature limit in Part 8 during an "Allowable Temperature Excursion", provided that the temperature controller setpoint complies with the temperature limit. An Allowable Temperature Excursion is one of the following:
- a. A temperature excursion not exceeding 20 degrees F; or
  - b. A temperature excursion for a period or periods which when combined are less than or equal to 15 minutes in any hour; or



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**Source Nos. S-599, S-1010, A-598, A-599, A-600, & A-601**

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- c. A temperature excursion for a period or periods which when combined are more than 15 minutes in any hour, provided that all three of the following criteria are met.
  - i. the excursion does not exceed 50 degrees F;
  - ii. the duration of the excursion does not exceed 24 hours; and
  - iii. the total number of such excursions does not exceed 12 per calendar year (or any consecutive 12-month period).

Two or more excursions greater than 15 minutes in duration occurring during the same 24-hour period shall be counted as one excursion toward the 12-excursion limit.

(Basis: Regulation 2-1-403)

- 11. For each Allowable Temperature Excursion that exceeds 20 degrees F and 15 minutes in duration, the owner/operator shall keep sufficient records to demonstrate that they meet the qualifying criteria described above. Records shall be retained for a minimum of five years from the date of entry, and shall be made available to the Air District upon request. Records shall include at least the following information:
  - a. Temperature controller setpoint;
  - b. Starting date and time, and duration of each Allowable Temperature Excursion;
  - c. Measured temperature during each Allowable Temperature Excursion;
  - d. Number of Allowable Temperature Excursions per month, and total number for the current calendar year; and
  - e. All strip charts or other temperature records.(Basis: Regulation 2-1-403)
- 12. Prior to the commencement of construction, the owner/operator of A-599 and/or A-601 shall submit plans to the Air District's Source Test Division to obtain approval of the design and location of the source test ports. The sample ports shall be installed in accordance with Air District's Manual of Procedures and EPA Method 1. Ports for filterable particulate and PM10 and PM2.5 testing shall be installed. (Regulation 1-501, Regulation 6 Rule 1)
- 13. No later than 90 days from the initial startup of each A-598/599 and annually thereafter, the owner/operator shall conduct Air District-approved source test to determine initial and annual compliance with the limits in Parts 4 and 5. To demonstrate compliance with Parts 4h, 6, and 7, the owner/operator shall record the feed gas (acid and/or amine) and natural gas usage on a daily, monthly, and rolling 12 consecutive month basis in an Air District approved log, in units of MMscf per day, month, and consecutive 12 month period, respectively, and perform emissions calculations for each pollutant identified in Parts 4h, 6, and 7 using the latest approved source test emissions factors, in units of lbs/MMscf multiplied by the feed gas and/or natural gas usage in MMscf per day, month, consecutive 12 month period.

The owner/operator shall submit a proposed source test protocol to the Source Test group at least 30 days before conducting the source test. Within 60 days of the source test, the owner/operator shall submit the results of the source test to the Air District. The owner/operator shall repeat the source test every calendar year afterward. The owner/operator may propose a change in testing frequency after 3 years if the source test results are consistently below 50% of the limits in Parts 4, 5, 6 and/or 7. Written approval by the Air District's Engineering Division shall be received by the owner/operator prior to the change in testing schedule. The owner/operator shall revert to yearly source testing once the source test results exceed 50% of the limits in Parts 4, 5, 6 and/or 7. [BACT, Cumulative Increase; Offsets; Regulation 2, Rule 5]

- 14. No later than 90 days from the initial startup of each A-600/601 and annually thereafter, the owner/operator shall conduct Air District-approved source test to determine initial and annual compliance with the limits in Parts 4 and 5. To demonstrate compliance with Parts 6 and 7, the owner/operator shall record the feed gas (acid and/or amine) and natural gas usage on both a monthly and rolling 12 consecutive month basis in an Air District approved log, in units of MMscf per month and consecutive 12 month period, respectively, and



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-599, S-1010, A-598, A-599, A-600, & A-601**

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perform emissions calculations for each pollutant identified in Parts 6 and 7 using the latest approved source test emissions factors, in units of lbs/MMscf multiplied by the feed gas and/or natural gas usage in MMscf per consecutive 12 month period.

The owner/operator shall submit a proposed source test protocol to the Source Test group at least 30 days before conducting the source test. Within 60 days of the source test, the owner/operator shall submit the results of the source test to the Air District. The owner/operator shall repeat the source test every calendar year afterward. The owner/operator may propose a change in testing frequency after 3 years if the source test results are consistently below 50% of the limits in Parts 4, 5, 6 and/or 7. Written approval by the Air District's Engineering Division shall be received by the owner/operator prior to the change in testing schedule. The owner/operator shall revert to yearly source testing once the source test results exceed 50% of the limits in Parts 4, 5, 6 and/or 7. [BACT, Cumulative Increase; Offsets; Regulation 2, Rule 5]

15. The owner/operator shall properly maintain and properly operate A-599 and/or A-601 SO<sub>2</sub> Scrubbers according to the manufacturer's specification such that the liquid circulation rate shall not be below 120 gallons per minute. The owner/operator of A-599 and/or A-601 shall properly install, properly maintain, properly calibrate and properly operate per manufacturer's specifications an Air District's approved continuous liquid flow meter on each of the SO<sub>2</sub> Scrubber. (Basis: Regulation 2-2-208 Cumulative Increase, BACT)
16. The owner/operator shall properly maintain and properly operate A-599 and/or A-601 SO<sub>2</sub> Scrubbers according to the manufacturer's specification such that the pH shall not be below 6 on a daily average basis (or a value greater than 6, if APCO determines that a larger pH value is necessary to adequately ensure that sulfur dioxide emissions from S-599 and/or A-601 are abated by 97% by weight). The owner/operator shall perform an annual inspection and calibration on the pH meter. (Basis: Regulation 2-2-208 Cumulative Increase, BACT)
17. Within 90 days of the startup of the Sulfur Treatment Unit, the owner/operator of S-599, and A-598 through A-601 shall properly install, properly maintain, properly calibrate and properly operate per manufacturer's specifications, an Air District approved or certified NO<sub>x</sub> continuous emission monitor (CEMS) to demonstrate compliance with Parts 4, 5, 6 and/or 7. The owner/operator of S-599 and A-598 through A-601 shall perform daily calibrations, quarterly audit and annual RATA tests in accordance with Appendix B and F. (Basis: Regulation 2-2-208 Cumulative Increase, BACT, Regulation 1-522)  
  
The NO<sub>x</sub> concentration (150 ppm @ 3% O<sub>2</sub>), lb/MMBtu and lb/hr limits in Parts 4 and 5 of Condition 27648 shall not apply during startup and shutdown events. Startup and shutdowns shall not exceed 36 hours per event. The 36 hour startup period is in addition to the heater's refractory change out (including the dryout/warmup periods), which shall not exceed 60 hours per refractory change out. (Basis: Regulation 2-2-208 Cumulative Increase, BACT)
18. Within 90 days of the startup of the Sulfur Treatment Unit, the owner/operator of S-599 and A-598 through A-601 shall properly install, properly maintain, properly calibrate and properly operate per manufacturer's specifications, an Air District approved or certified SO<sub>2</sub> continuous emission monitor (CEMS) to demonstrate compliance with Parts 4, 5, 6 and/or 7 at all times of operation. The owner/operator of S-599 and A-598 through A-601 shall perform daily calibrations, quarterly audit and annual RATA tests in accordance with Appendix B and F. (Basis: Regulation 2-2-208 Cumulative Increase, BACT, Regulation 1-522)
19. To determine compliance with the above condition(s), the owner/operator shall maintain the following records and provide all of the data necessary to evaluate compliance with the above conditions, including, but not necessarily limited to, the following information:



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**Source Nos. S-599, S-1010, A-598, A-599, A-600, & A-601**

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- a. Date, time, and duration of startups, shutdowns, upsets, and malfunctions from S-599, A-598 through A-601
- b. On a hourly basis, type and amount (DSCF) of gas being burned at A-598 and/or A-600;
- c. Records of the exhaust flow rate at A-598/A-599 and/or A-600/A-601;
- d. Records of all source test results including the measured exhaust flow rate and emission factors at A-598/A-599 and/or A-600/A-601;
- e. Daily and monthly emission calculations based on source test results of Parts 4 and 5, totaled on a consecutive 12 month basis per parts 6 and 7;
- f. Daily records of pH measured three times per day (once per shift, 3 shifts per day) and averaged on a daily basis and liquid circulation rates of A-599 and/or A-601 reading per parts 15 and 16;
- g. Continuous temperature record at A-598 and/or A-600 per Part 8; and
- h. Record of annual inspection and calibration of the pH meter.

These records shall be kept on-site for at least 5 years. All records shall be recorded in an Air District approved log and made available for inspection by Air District staff upon request. These recordkeeping Requirements shall not replace the recordkeeping Requirements contained in any applicable Air District Regulations.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 1-441)

20. When operating S-599 with S-1010 during planned and unplanned outages, as defined in Part 1, the owner/operator of S-599 shall continue to comply with the most stringent requirements of either Conditions 27818 and/or 27648.

(Basis: Regulation 1-107, Regulation 2-2-208 Cumulative increase)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-600, S-612, S-613, S-616, A-622, A-623, A-624, & A-625**

**Condition No. 27649**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance): Phillips 66 Rodeo Renewed Project.

Source S-600 Pretreatment Unit (3 Trains)

S-606 Spent Water Tank

S-612 (2 DAF units)

S-613 (3 Process Tanks)

S-616 (2 Collection Tanks)

All sources above are abated by:

- A-622, Biofilter or A-624 Biofilter; and
  - A-623, Activated Carbon Vessel or A-625, Activated Carbon Vessel
1. The owner/operator of S-600 shall not exceed 80,000 barrels of Renewable Feedstock in any calendar day and/or 29,200,000 barrels in any consecutive rolling 12-month period. (Basis: Regulation 2-2-208 Cumulative Increase)
  2. The owner/operator of S-606 Spent Water Tank shall ensure that throughput does not exceed 576,000 gallons per calendar day and/or 210,240,000 gallons of spent water in any consecutive rolling 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
  3. The owner/operator of S-612 (2 DAF Units) shall ensure the throughput does not exceed 576,000 gallons per calendar day and/or 210,240,000 gallons of wastewater combined for 2 DAF units in any consecutive rolling 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
  4. The owner/operator of S-613 (3 process tanks) shall ensure the throughput does not exceed 576,000 gallons per calendar day and/or 210,240,000 gallons of wastewater combined for 3 tanks in any consecutive rolling 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
  5. The owner/operator of S-616 (2 Collection Tanks) shall ensure the throughput does not exceed 144,000 gallons per calendar day and/or 52,560,000 gallons of wastewater combined for 2 tanks in any consecutive rolling 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
  6. The owner/operator of S-600, Pretreatment Unit shall abate S-600 and its associated equipment (including S-606, S-612, S-613 and S-616) with Biofilter (A-622) or Biofilter (A-624) and Activated Carbon Vessel (A-623) or Activated Carbon Vessel (A-625) at all times when S-600 is in operation. The owner/operator shall properly maintain, properly service and properly operate A-622 through A-624 according to the manufacturer's specifications.  
(Basis: Regulation 2-2-208 Cumulative Increase, Offsets)
  7. The owner/operator of Activated Carbon Vessels A-623 and/or A-625. shall each not exceed a maximum flowrate of 2,200 DSCFM (and/or 4,400 DSCFM combined). The owner/operator of A-623 and/or A-625 shall properly install, properly maintain, properly calibrate and properly operate per manufacturer's specifications, an Air District approved continuous flow meter at the blower's exhaust to the combined stack of the activated carbon vessels (A-623 and/or A-625).  
(Basis: Regulation 2-2-208 Cumulative Increase)



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-600, S-612, S-613, S-616, A-622, A-623, A-624, & A-625**

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8. The owner/operator of S-600 and its associated equipment (including S-606, S-612, S-613 and S-616) shall not exceed 10 ppmv (measured as methane, C1) at the outlet of both Activated Carbon Vessels (A-623 and A-625). (Basis: Regulation 2-2-208 Cumulative Increase)
9. The owner/operator of S-600 and its associated equipment (including S-606, S-612, S-613 and S-616) shall not exceed 2.6 pounds TOC per calendar day and/or 956 pounds TOC per any consecutive rolling 12-month period. For the purpose of these conditions TOC shall be considered equal to POC and equal to NMOC. (Basis: Regulation 2-2-208 Cumulative Increase, Offsets)
10. The owner/operator of S-600 and its associated equipment (including S-606, S-612, S-613 and S-616), and Activated Carbon Vessels A-623 and A-625 shall monitor the daily TOC concentrations with a GC analyzer, flame-ionization detector (FID), or other method approved in writing by the Air Pollution Control Officer at the following locations:
  - a. At the inlet to the carbon vessel
  - b. At the outlet of the carbon vessel(Basis: Regulation 2-2-208 Cumulative Increase)
11. The owner/operator of S-600 shall record these monitor readings in a monitoring log at the time they are taken. The monitoring results shall be used to estimate the frequency of carbon change-out necessary to maintain compliance with Parts 8 and 9 and shall be conducted on a daily basis.  
(Basis: Regulation 2-2-208 Cumulative Increase)
12. The owner/operator of Activated Carbon Vessels A-623 and A-625 shall change out the last carbon vessel with unspent carbon upon detection at its outlet of 10 ppmv (measured as C1).  
(Basis: Regulation 2-2-208 Cumulative Increase)
13. The owner/operator of this source shall maintain the following records for each day of operation of the source:
  - a. Daily amount of throughput at S-600 and its associated equipment (including S-606, S-612, S-613 and S-616), totaled on both a monthly and consecutive 12-month period basis;
  - b. Daily records of the exhaust flow rate at A-623 and/or A-625;
  - c. Daily TOC monitor reading and emission calculations, totaled on a calendar day, monthly, and consecutive 12-month period basis. The daily emission calculation shall be calculated using the outlet concentration from Part 10 multiplied by the actual daily flow rate of both A-623 and A-625 combined and assumed 24 hours of operation per day. The owner/operator of S-600 shall multiply the daily emission by 365 and divide by 2000 to get the tonnage for compliance demonstration with Part 9 above
  - d. Daily TAC emission calculations based on the result of Condition #27646 Part 11 analysis, totaled on both a monthly and consecutive 12-month period basis;
  - e. The hours and times of operation of S-600, A-622, A-623, A-624 and A-625;
  - f. f Daily TOC monitor reading or analysis result for the day of operation they are taken;
  - g. GC and/or FID annual maintenance and calibration records per manufacturer's recommendations; and
  - h. Date, time and the number of carbon vessels removed from service.All measurements, records and data required to be maintained by the owner/operator shall be retained and made available for inspection by the Air District for at least five years following the date the data is recorded  
(Basis: Regulation 2-2-208 Cumulative Increase)
14. The owner/operator of S-600 PTU, A-622, A-623, A-624 and A-625 shall ensure visible particulate emissions from S-600 PTU does not exceed Ringelmann 0.5 or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301.





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-600, S-612, S-613, S-616, A-622, A-623, A-624, & A-625**

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(Basis: Regulation 1-301, Regulation 6-1-301 and 6-1-305)

15. The owner/operator of S-600 PTU, A-622 through A-625 shall not discharge any odorous substance which causes the ambient air at or beyond the property line to be odorous.  
(Basis: Regulation 7)
16. The owner/operator of S-600 PTU shall maintain, update and operate the Odor Prevention and Management Plan as reviewed and approved by the County of Contra Costa.  
(Basis: Regulation 2-1-403 Permit Condition, CEQA)
17. The owner/operator shall operate A-622 and/or A-624 Biofilters within the following parametric ranges to ensure compliance with the performance standards specified in Parts 8, 9, 14, and/or 15:
- Daily pH of the biofilter media shall be maintained at minimum 1.5;
  - The pressure drop across each biofilter shall be greater than 0.25 inches of water and less than 5 inches of water;
  - Each biofilter S-622 and/or A-624 shall maintain a minimum water spray rate of 400 gallons per day.
- (Basis: Regulation 1-301, Regulation 2-1-403, Regulation 6-1, Cumulative Increase)
18. The owner/operator of A-622 and/or A-624 shall properly install, properly operate, properly calibrate and properly maintain per manufacturer's specifications at A-622 and/or A-624 with the following minimum requirements:
- Follow manufacturer's proposed design and recommended operating, calibrating and maintenance specifications of the pH, flow meter and pressure differential gauge;
  - Equip A-622 and/or A-624 with a water drain system. The water drain system shall be controlled by adjusting the water flow rate based on the pH;
  - Replace biofilter media at a frequency recommended by the manufacturer;
  - Inspect water sprayers, water pumps, and fans daily to ensure that they are operating satisfactorily and consistent with the manufacturer's specifications. The owner/operator shall maintain records of the date and time of inspection, results of inspection, equipment manufacturer's specifications, and record any corrective actions taken;
  - Installation of an alarm system that notifies the owner/operator before any parameter in part 17 exceedance occurs.
- The owner/operator may implement additional measures to ensure that each biofilter A-622 and/or A-624 meets the emission limits, and reduces the odor as required in Parts 8, 9, 14 and 15.  
[Basis: Regulations 1-301, 2-1-403, and 6-1; Cumulative Increase]
19. The owner/operator of A-622 and/or A-624 shall monitor and record in an Air District-approved log the following operating parameters of A-622 and/or A-624:
- The pH of the biofilter media shall be measured and recorded daily using an Air District approved pH meter;
  - Pressure drop across each filter shall be measured and recorded on a daily basis;
  - Water flow rate across each biofilter shall be measured and recorded on a daily basis;
  - Biofilter's condition and integrity shall be assessed visually daily for signs of deterioration;
  - pH, flow meter and pressure differential gauge maintenance and calibration records per the manufacturer's recommendation and specifications;
  - Document the time when any parameter operates out of range and corrective action.
- (Basis: Regulations 1-301, 2-1-403, and 6-1; Cumulative Increase)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-602, A-606, A-607, A-608, A-609, A-610, A-611, A-612, A-613, & A-614**

**Condition No. 27650**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance) - Phillips 66 Rodeo Renewed Project.

Source S-602 Filter Aid Storage (9) Silos abated by A-606 through A-614 Baghouses (9), and Truck Unloading/Traffic

1. The owner/operator shall ensure that Source S-602, Filter Aid Storage Silos, are abated by A-606 through A-614, Baghouses at all times when S-602 is in operation.  
(Basis: Cumulative Increase, Offsets, Regulation 6-1-301, 6-1-311.1)
2. The owner/operator of S-602 shall ensure visible particulate emissions from each baghouse (A-606 through A-614) does not exceed Ringelmann 0.5 or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301.  
(Basis: Regulation 1-301, Regulations 2-1-403, 6-1-301, and 6-1-305)
3. The owner/operator of S-602 shall ensure the outlet grain loading for each A-606 through A-614 baghouses does not exceed 0.0015 grain/dscf of PM<sub>10</sub>/PM<sub>2.5</sub> (front and back half).  
(Basis: Regulation 2-2-208 Cumulative Increase)
4. The owner/operator shall ensure the exhaust gas flow rate for each A-606 through A-614 baghouses does not exceed a maximum flow rate of 1,600 dscfm.  
(Basis: Regulation 2-2-208 Cumulative Increase)
5. The owner/operator shall ensure the total throughput of filter aid at S-602 does not exceed 158,016 pounds per calendar day and/or 28,838 tons in any consecutive rolling 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
6. The owner/operator shall equip each A-606 through A-614 Baghouses with an Air District's approved manometer or an Air District approved device for measuring the pressure drop across the baghouse.  
(Basis: Regulation 6-1-301, 6-1-311.1)
7. The owner/operator shall inspect Baghouses, A-A-606 through A-614 weekly to ensure proper operation. The following items shall be checked:
  - a. The pressure drop across the baghouse shall be checked weekly. The pressure drop shall be no lower than 0.5 inches of water and no greater than 6 inches of water;
  - b. The baghouse exhaust shall be checked weekly for evidence of particulate breakthrough. If breakthrough is evident from plume observations, dust buildup near the stack outlet, or abnormal pressure drops, the filter bags shall be checked for any tears, holes, abrasions, and scuffs, and replaced as needed;
  - c. All silos shall be discharged in a timely manner to maintain compliance with 8(a) above;
  - d. The pulsejet, shaker cleaning system shall be maintained and operated at sufficient intervals to maintain compliance with 8(a) above;
  - e. Record the daily type of material and throughput, totaled monthly and consecutive 12-month period;
  - f. Maintain 10% of spare set of bags at all times; and
  - g. manometer or Air District approved pressure differential measurement device shall be calibrated per the manufacturer's specification.  
(Basis: Regulation 2-1-403 Permit Condition)
8. The owner/operator of S-602 shall not exceed 6,428 filter aid delivery truck trips in any consecutive rolling 12-month period.  
(Basis: Regulation 2-1-403 Permit Condition)



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-602, A-606, A-607, A-608, A-609, A-610, A-611, A-612, A-613, & A-614**

**Condition No. 27650**

**Plant No. 21359**

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9. To demonstrate compliance with the above permit conditions, the owner/operator of S-602 shall maintain the following record
  - a. The dates of all inspections, calibrations and all maintenance work including bag replacement for the baghouse
  - b. Daily and monthly hours of operation, totaled on consecutive rolling 12-month period basis
  - c. Daily and monthly number of trucks for filter aid delivery and their delivery time
  - d. Daily and monthly throughput of filter aid, totaled on consecutive rolling 12-month period basis
  - e. Weekly pressure drop readings and any corrective actions taken if non-compliant with part 7
  - f. Records of all source test results include grain loading and baghouse exhaust flow rate
  - g. Daily  $PM_{10}$ ,  $PM_{2.5}$ , and Crystalline Silica emission calculations based on source test results, totaled on a monthly and consecutive 12-month period basis.All record shall be retained on-site for five years, from the date of entry and made available for Air District inspection by Air District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable Air District Regulations.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 1-441)
10. The owner/operator shall not exceed the following limits from S-602 (combined for all 9 baghouses):
  - a.  $PM_{10}/PM_{2.5}$ : 4.4 lbs per calendar day and/or 1,622 lbs per any consecutive 12-month period
  - b. Crystalline Silica: 0.093 lbs per hour and/or 811 lbs per any consecutive 12-month period(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-5)
11. Not later than 60 days from the startup of S-602 and at least once every 2 years thereafter, the owner/operator shall conduct Air District approved source tests to determine compliance with the  $PM_{10}/PM_{2.5}$  limits (including both the condensable and filterable PM), baghouse exhaust flow rate and crystalline silica limits in Parts 4, 5 and 10. The grain loading and flowrate determined in the source test shall be used to determine the compliance with the limits above assuming 24 hours of operation per day and 8760 hours per any consecutive 12 month period. To determine compliance with the Crystalline Silica emission limits above, the owner/operator shall multiply the calculated  $PM_{10}/PM_{2.5}$  emissions with the weight percentage of Crystalline Silica in the filter aid material. The owner/operator shall submit the source test results to the Air District staff no later than 60 days after the source test.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-403 Permit Condition)
12. The owner/operator of S-602 shall comply with all applicable testing requirements as specified in Volume IV of the Air District's Manual of Procedures and EPA Method 1. The owner/operator shall notify the Air District's Source Test Section, in writing, of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to testing.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-403 Permit Condition)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-603, A-615, A-616, A-617, & A-618**

**Condition No. 27651**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance) - Phillips 66 Rodeo Renewed Project.

Source S-603 Polyethylene Removal Filter Aid Day Hoppers (4) abated by A-615 through A-618 Baghouses (4), and Truck Load out Traffic

1. The owner/operator shall ensure that Source S-603, Filter Aid Day Hoppers, are abated by A-615 through A-618, Baghouses at all times when S-603 is in operation. (Basis: Cumulative Increase, Offsets, Regulation 6-1-301, 6-1-311.1)
2. The owner/operator of S-603 shall ensure visible particulate emissions from each day hopper does not exceed Ringelmann 0.5 or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301.  
(Basis: Regulation 1-301, Regulations 2-1-403, 6-1-301, and 6-1-305)
3. The owner/operator shall ensure the outlet grain loading for each A-615 through A-618 baghouses does not exceed 0.002 grain/dscf of PM<sub>10</sub>/PM<sub>2.5</sub> (front and back half).  
(Basis: Regulation 2-2-208 Cumulative Increase)
4. The owner/operator shall ensure the exhaust gas flow rate for each A-615 through A-618 baghouses does not exceed a maximum flow rate of 665 dscfm.  
(Basis: Regulation 2-2-208 Cumulative Increase)
5. The owner/operator shall ensure the total throughput of filter aid at S-603 does not exceed 90,288 pounds per calendar day and/or 16,479 tons in any consecutive rolling 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
6. The owner/operator shall equip each A-615 through A-618 Baghouses with an Air District's approved manometer or an Air District approved device for measuring the pressure drop across the baghouse.  
(Basis: Regulation 6-1-301, 6-1-311.1)
7. The owner/operator shall inspect Baghouses, A-615 through A-618 weekly to ensure proper operation. The following items shall be checked:
  - a. The pressure drop across the baghouse shall be checked weekly. The pressure drop shall be no lower than 0.5 inches of water and no greater than 6 inches of water;
  - b. The baghouse exhaust shall be checked weekly for evidence of particulate breakthrough. If breakthrough is evident from plume observations, dust buildup near the stack outlet, or abnormal pressure drops, the filter bags shall be checked for any tears, holes, abrasions, and scuffs, and replaced as needed;
  - c. All hoppers shall be discharged in a timely manner to maintain compliance with 7(a) above;
  - d. The pulsejet, shaker cleaning system shall be maintained and operated at sufficient intervals to maintain compliance with 7(a) above;
  - e. Record the daily type of material and throughput, totaled monthly and consecutive 12-month period;
  - f. Maintain 10% of spare set of bags at all times; and
  - g. manometer or Air District approved pressure differential measurement device shall be calibrated per the manufacturer's specification.  
(Basis: Regulation 2-1-403 Permit Condition)
8. The owner/operator of S-603 and S-605 shall not exceed a combined 9,038 filter aid removal truck trips in any consecutive rolling 12-month period.  
(Basis: Regulation 2-1-403 Permit Condition)



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-603, A-615, A-616, A-617, & A-618**

**Condition No. 27651**

**Plant No. 21359**

**Application No. 31157**

9. To demonstrate compliance with the above permit conditions, the owner/operator of S-603 shall maintain the following record
  - a. The dates of all inspections, calibrations and all maintenance works including bag replacement for the baghouse
  - b. Daily and monthly hours of operation, totaled on consecutive rolling 12-month period basis
  - c. Daily and monthly number of trucks for filter aid removal and their removal time
  - d. Daily and monthly throughput of filter aid, totaled on consecutive rolling 12-month period basis
  - e. Weekly pressure drop readings and any corrective actions taken if non-compliant with part 7
  - f. Records of all source test results include grain loading and baghouse exhaust flow rate
  - g. Daily PM<sub>10</sub>/PM<sub>2.5</sub> and Crystalline Silica emission calculations based on source test results, totaled on a monthly and consecutive 12-month period basisAll record shall be retained on-site for five years, from the date of entry and made available for Air District inspection by Air District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable Air District Regulations.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 1-441)
10. The owner/operator shall not exceed the following limits from S-603 (combined for all 4 hoppers):
  - a. PM<sub>10</sub>/PM<sub>2.5</sub>: 1.1 lbs per calendar day and/or 400 lbs per any consecutive 12-month period
  - b. Crystalline Silica: 0.0228 lbs per hour and/or 200 lbs per any consecutive 12-month period(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-5)
11. Not later than 60 days from the startup of S-603 and at least once every 2 years thereafter, the owner/operator shall conduct Air District approved source tests to determine compliance with the PM<sub>10</sub>/PM<sub>2.5</sub> limits (including both the condensable and filterable PM), baghouse exhaust flow rate and silica limit in Parts 3, 4 and 10. The grain loading and flowrate determined in the source test shall be used to determine the compliance with the PM<sub>10</sub>/PM<sub>2.5</sub> emissions limits above assuming 24 hours of operation per day and 8760 hours per any consecutive 12-month period. To determine compliance with the Crystalline Silica emission limits above, the owner/operator shall multiply the calculated PM<sub>10</sub>/PM<sub>2.5</sub> emissions with the weight percentage of Crystalline Silica in the filter aid material. The owner/operator shall submit the source test results to the Air District staff no later than 60 days after the source test.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-403 Permit Condition)
12. The owner/operator of S-603 shall comply with all applicable testing requirements as specified in Volume IV of the Air District's Manual of Procedures and EPA Method 1. The owner/operator shall notify the Air District's Source Test Section, in writing, of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to testing.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-403 Permit Condition)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-605, A-619, A-620, & A-621**

**Condition No. 27652**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance) - Phillips 66 Rodeo Renewed Project.

Source S-605 Filter Aid Adsorption Day Hoppers (3) abated by A-619 through A-621 Baghouses (3), and Truck Loadout Traffic

1. The owner/operator shall ensure that Source S-605, Filter Aid Adsorption Day Hoppers, are abated by A-619 through A-621, Baghouses at all times when S-605 is in operation.  
(Basis: Cumulative Increase, Offsets, Regulation 6-1-301, 6-1-311.1)
2. The owner/operator of S-605 shall ensure visible particulate emissions from each day hopper does not exceed Ringlemann 0.5 or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301.  
(Basis: Regulation 1-301, Regulation 6-1-301 and 6-1-305)
3. The owner/operator shall ensure the outlet grain loading for each A-619 through A-621 baghouses does not exceed 0.002 grain/dscf of PM<sub>10</sub>/PM<sub>2.5</sub> (front and back half).  
(Basis: Regulation 2-2-208 Cumulative Increase)
4. The owner/operator shall ensure the exhaust gas flow rate for each A-619 through A-621 baghouses does not exceed a maximum flow rate of 665 dscfm.  
(Basis: Regulation 2-2-208 Cumulative Increase)
5. The owner/operator shall ensure the total throughput of filter aid at S-605 does not exceed 67,728 pounds per calendar day and/or 12,359 tons in any consecutive rolling 12-month period.  
(Basis: Regulation 2-2-208 Cumulative Increase)
6. The owner/operator shall equip each A-619 through A-621 Baghouses with an Air District's approved manometer or an approved device for measuring the pressure drop across the baghouse.  
(Basis: Regulation 6-1-301, 6-1-311.1)
7. The owner/operator shall inspect Baghouses A-619 through A-621 weekly to ensure proper operation. The following items shall be checked:
  - a. The pressure drop across the baghouse shall be checked weekly. The pressure drop shall be no lower than 0.5 inches of water and no greater than 6 inches of water;
  - b. The baghouse exhaust shall be checked weekly for evidence of particulate breakthrough. If breakthrough is evident from plume observations, dust buildup near the stack outlet, or abnormal pressure drops, the filter bags shall be checked for any tears, holes, abrasions, and scuffs, and replaced as needed;
  - c. All hoppers shall be discharged in a timely manner to maintain compliance with 7(a) above;
  - d. The pulsejet, shaker cleaning system shall be maintained and operated at sufficient intervals to maintain compliance with 7(a) above;
  - e. Record the daily type of material and throughput, totaled monthly and consecutive 12-month period;
  - f. Maintain 10% of spare set of bags at all times; and
  - g. manometer or Air District approved pressure differential measurement device shall be calibrated per the manufacturer's specification.  
(Basis: Regulation 2-1-403 Permit Condition)
8. To demonstrate compliance with the above permit conditions, the owner/operator of S-605 shall maintain the following record





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-605, A-619, A-620, & A-621**

**Condition No. 27652**

**Plant No. 21359**

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- a. The dates of all inspections, calibrations and all maintenance works including bag replacement for the baghouse
- b. Daily and monthly hours of operation, totaled on a consecutive rolling 12-month period basis
- c. Daily and monthly number of truck for filter aid removal and their removal time per Condition 27651, Part 8.
- d. Daily and monthly throughput of filter aid, totaled on a consecutive rolling 12-month period basis
- e. Weekly pressure drop readings and any corrective actions taken if non-compliant with part 8
- f. Records of all source test results include grain loading and baghouse exhaust flow rate
- g. Daily  $PM_{10}/PM_{2.5}$  and Crystalline Silica emission calculations based on source test results, totaled on a monthly and consecutive 12-month period basis

All record shall be retained on-site for five years, from the date of entry and made available for Air District inspection by Air District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable Air District Regulations.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 1-441)

9. The owner/operator shall not exceed the following limits from S-605 (combined for all 3 hoppers):
  - a.  $PM_{10}/PM_{2.5}$ : 0.82 lbs per calendar day and/or 300 lbs per consecutive 12-month period
  - b. Crystalline Silica: 0.0171 lbs per hour and/or 150 lbs per consecutive 12-month period

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-5)

10. Not later than 60 days from the startup of S-605 and at least once every 2 years thereafter, the owner/operator shall conduct Air District approved source tests to determine initial compliance with the  $PM_{10}/PM_{2.5}$  limits (including both condensable and filterable emissions), baghouse exhaust flow rate and silica limits in Parts 3, 4 and 9. The grain loading and flowrate determined in the source test shall be used to determine the compliance with the emissions limits above assuming 24 hours of operation per day and 8760 hours per any consecutive 12 month period. To determine compliance with the Crystalline Silica emission limits above, the owner/operator shall multiply the calculated  $PM_{10}/PM_{2.5}$  emissions with the weight percentage of Crystalline Silica in the filter aid material. The owner/operator shall submit the source test results to the Air District staff no later than 60 days after the source test.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-403 Permit Condition)

11. The owner/operator shall comply with all applicable testing requirements as specified in Volume IV of the Air District's Manual of Procedures and EPA Method 1. The owner/operator shall notify the Air District's Source Test Section, in writing, of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to testing.

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-1-403 Permit Condition)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-195**

**Condition No. 27653**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance - Phillips 66 Rodeo Renewed Project) - Established throughputs for S-195 Sludge Sediment Tank (Tank 501).

1. The owner/operator of S-195 shall ensure that the renewable sludge does not exceed 97,928 barrels in any consecutive rolling 12-month period and/or 7,111 barrels in any calendar day.  
(Basis: Regulation 2-2-208 Cumulative Increase)
2. The owner/operator of S-195 may store alternate organic liquid(s) other than the materials specified in Part 1 and/or usages in excess of those specified in Part 1 provided that the owner/operator can demonstrate that all of the following are satisfied:
  - a. Total POC emissions from S-195 do not exceed 0.956 tons in any consecutive rolling twelve-month period and/or 9 pounds in any calendar day;
  - b. Total NPOC emissions from S-195 shall be zero;
  - c. The use of these materials does not increase toxic emissions to equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.(Basis: Regulation 2-2-208 Cumulative Increase; Regulation 2-5 Toxics)
3. To determine compliance with the above parts, the owner/operator of S-195 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:
  - a. Quantities, true vapor pressure and emissions calculations of each type of liquid stored at this source on a daily basis.
  - b. If a material other than those specified in Part 1 is stored, POC and/or NPOC, and toxic component contents of each material used; and Air District approved mass emissions calculations to demonstrate compliance with Part 2, on a daily basis;
  - c. Daily throughput and/or Air District approved emissions calculations shall be totaled for each consecutive twelve-month period.

All records shall be retained on-site for at least five years, from the date of entry, and made available for inspection by Air District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable Air District Regulations. (Basis: Cumulative Increase; Toxics)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-11, S-12, S-13, S-22, S-45, & S-438**

**Condition No. 27654**

**Plant No. 21359**

**Application No. 31157**

Conditions for Combustion sources and SO<sub>2</sub> Cap, except for Gas Turbines, Duct Burners, Engines, and S45, Heater (U246 B801 A/B)

Amended by Rodeo Renewed Project, Application 31157 (2022)

**A. Heater Firing Rate Limits and General Requirements**

1a. Each heater listed below shall not exceed the indicated daily firing rate limit (based on higher heating value of fuel), which are considered maximum sustainable firing rates. The indicated hourly firing rate is the daily limit divided by 24 hours and is the basis for permit fees and is the rate listed in the District database.

District Source Number	Refinery ID Number	Daily Firing Limit (MMbtu/day)	Hourly Firing Rate (MMbtu/hr)
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S7	U231/B103	1,536	64 Condition 27646, part 1
S21	U244/B507	194.4	8.1

[Regulation 2-1-234.3]

1b. Each heater listed below shall not exceed the indicated daily firing rate limit (based on higher heating value of fuel), which are considered maximum sustainable firing rates. The indicated hourly firing rate is the daily limit divided by 24 hours and is the basis for permit fees and is the rate listed in the District database.

District Source Number	Refinery ID Number	Daily Firing Limit (MMbtu/day)	Hourly Firing Rate (MMbtu/hr)
S2	U229/B301	528	22 Condition 27646, part 1
S3	U230/B201	1,272	53 Condition 27646, part 1
S4	U231/B101	2,304	96 Condition 27646, part 1
S5	U231/B102	2,496	104 Condition 27646, part 1
S9	U240/B2	1,464	61 Condition 27646, part 1
S10	U240/B101	5,352	223 Condition 27646, part 1
S11	U240/B201	2,592	108
S12	U240/B202	1,008	42
S13	U240/B301	4,656	194
S15 thru S19	U244/B501 thru B505	5,754	239.75 Condition 27646, part 1
S20	U244/B506	552	23 Condition 27646, part 1
S22	U248/B606	744	31
S29	shutdown A/N 31157 upon startup		
S30	shutdown A/N 31157 upon startup		
S31	U200/B501	480	20 Condition 27646, part 1
S43	U200/B202	5,520	230 Condition 27646, part 1
S44	U200/B201	1,104	46 Condition 27646, part 1
S351	shutdown A/N 31157 upon startup		
S336	U231/B104	2,664	111 Condition 27646, part 1
S337	U231/B105	816	34 Condition 27646, part 1
S371/372	U228/B520 and B521	1,392	58 Condition 27646, part 1

[Regulation 2-1-301]



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-11, S-12, S-13, S-22, S-45, & S-438**

**Condition No. 27654**

**Plant No. 21359**

**Application No. 31157**

1c. Each heater listed below shall not exceed the indicated daily firing rate limit (based on higher heating value of fuel), which are considered maximum sustainable firing rates. The indicated hourly firing rate is the daily limit divided by 24 hours and is the basis for permit fees and is the rate listed in the District database.

District Source Number	Refinery ID Number	Daily Firing Limit (MMbtu/day)	Hourly Firing Rate (MMbtu/hr)
S438	U110	6,000	250
[Cumulative Increase]			

2a. All sources shall use only fuel gas and natural gas as fuel, EXCEPT for S438 which may also use pressure swing adsorption (PSA) off gas as fuel, and EXCEPT for S3 and S7 which may also use naphtha fuel during periods of natural gas curtailment, test runs, or for operator training. [Regulation 9-1-304 (sulfur content), Regulation 2, Rule 1, Consent Decree Case No. 05-0258, DATE: 1/27/05] Amended Application 12931

2b. Deleted.

2c. Deleted.

3a. The fuel gas shall be tested for total reduced sulfur (TRS) concentration by GC analysis at least once per 8 hour shift (3 times per calendar day). At least 90% of these samples shall be taken each calendar month. No readable samples or sample results shall be omitted. TRS shall include hydrogen sulfide, methyl mercaptan, methyl sulfide, dimethyl disulfide. As an alternative to GC TRS analysis, the fuel gas total sulfur content may be measured with a dedicated total sulfur analyzer (Houston Atlas or equivalent), and TRS concentration estimated based on the total sulfur/TRS ratio, with the TRS estimate increased by a 5% margin for conservatism. The total sulfur/TRS ratio shall be determined at least on a monthly basis through GC analyses of total sulfur and TRS values, and the most recent ratio shall be used to estimate TRS concentration.[SO2 Bubble]

3b. The average of the 3 daily fuel gas TRS sample results shall be reported to the District in a table format each calendar month, with a separate entry for each daily average. Sample reports shall be submitted to the District within 30 days of the end of each calendar month. Any omitted sample results shall be explained in this report. [SO2 Bubble]

4. Emissions of SO2 shall not exceed 1,612 lb/day on a monthly average basis from non-cogeneration sources burning fuel gas or liquid fuel. This limit shall not include S45, Heater (U246) and shall not include any engine. [SO2 Bubble]

5. The following records shall be maintained in a District-approved log for at least 5 years and shall be made available to the District upon request:

- Daily and monthly records of the type and amount of fuel combusted at each source listed in Part A.1. [Regulation 2, Rule 1]
- TRS sample results as required by Part A.3 [SO2 Bubble]
- SO2 emissions as required by Part A.4 [SO2 Bubble]
- The operator shall keep records of all visible emission monitoring required by Part 2b, shall identify the person performing the monitoring and shall describe all corrective actions taken [Regulation 2-6-409.2]
- The operator shall keep records of all visible emission monitoring required by Part 2c, of the results of required visual monitoring and Method 9 evaluations on these sources, shall identify the person performing the monitoring and shall describe all corrective actions taken.

[Regulation 2-6-409.2]



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-11, S-12, S-13, S-22, S-45, & S-438**

**Condition No. 27654**

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6. Sources listed below are affected facilities under NSPS Subpart J and are subject to the application requirements of NSPS Subparts A and J for fuel gas combustion devices. [Consent Decree Case No. 05-0258, DATE: 1/27/05]

S2 U229/B301  
S3 U230/B201  
S4 U231/B101  
S5 U231/B102  
S7 U231/B103  
S9 U240/B2  
S10 U240/B101  
S11 U240/B201  
S12 U240/B202  
S13 U240/B301  
S15-S19 U244/B501-B505  
S20 U244/B506  
S21 U244/B507  
S22 U244/B606  
S31 U200/B501

B. S351 Preheater. Deleted. S-351 shutdown in Rodeo Renewed Project, Application 31157 upon startup.

C. S371 and S372 Furnaces (Condition 27646, Part 1)

1. The S371 furnace shall be abated by the A16 SCR unit at all times, and the S372 furnace shall be abated by the A17 SCR unit at all times, except that S371 and S372 may operate without SCR abatement on a temporary basis for periods of planned or emergency maintenance. A District-approved NO<sub>x</sub> CEM shall monitor and record the NO<sub>x</sub> emission rates from these heaters whenever they operate without abatement. All emission limits applicable to S371 and S372 shall remain in effect whether or not they are operated with SCR abatement. [BACT, Cumulative Increase]
2. The concentration of NO<sub>x</sub> from S371 and S372 shall not exceed 20 ppmv, dry, corrected to 3% oxygen, averaged over any consecutive 3 hour period. This limit shall not apply during a startup period, which shall not exceed 12 hours. The startup exemption period may last up to 24 hours to allow the proper ammonia injection temperature to be reached provided that the temperature is monitored at least once per hour and that ammonia injection begins within 2 hours of reaching the proper temperature. This limit shall also not apply during a shutdown period which shall not exceed 9 hours. [BACT, Cumulative Increase]
3. The concentration of CO emissions from S371 and S372 shall not exceed 50 ppmv, dry, corrected to 3% oxygen, averaged over any consecutive 3 hour period. This limit shall not apply during a startup period, which shall not exceed 12 hours. The startup exemption period may last up to 24 hours to allow the proper ammonia injection temperature to be reached provided that the temperature is monitored at least once per hour and that ammonia injection begins within 2 hours of reaching the proper temperature. This limit shall also not apply during a shutdown period, which shall not exceed 9 hours. [BACT, Cumulative Increase]

D. S43 Coking Furnace (Unit 200 B-202) and S44 (Unit 200 B-201 PCT Reboil Furnace) (Condition 27646, Part 1)

1. Nitrogen oxide emissions from the S43 Coking Furnace (Unit 200 B-202) shall be abated by Selective Catalytic Reduction Unit A4 at all times, except that S43 may operate without SCR abatement on a temporary basis for periods of planned or emergency maintenance. A District-approved NO<sub>x</sub> CEM shall



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**Source Nos. S-11, S-12, S-13, S-22, S-45, & S-438**

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monitor and record the S43 NOx emission rate whenever S43 operates without abatement. All emission limits applicable to S43 shall remain in effect whether or not it is operated with SCR abatement. [BACT, Cumulative Increase]

2. The nitrogen oxides in the flue gases for S43, Unit 200 B-202 Coking Furnace and S44, Unit 200 B-201 PCT Reboil Furnace shall not exceed 40 ppm<sub>dv</sub> corrected to 3% oxygen, dry, over any consecutive 8 hour period. This limit shall not apply during a startup period which shall not exceed 12 hours. The startup exemption period may last up to 24 hours to allow the proper ammonia injection temperature to be reached provided that the temperature is monitored at least once per hour and that ammonia injection begins within 2 hours of reaching the proper temperature. This limit shall also not apply during a shutdown period which shall not exceed 9 hours. [BACT, Cumulative Increase]
3. The carbon monoxide in the flue gas for S43, Unit 200 B-202 Coking Furnace and S44, Unit 200 B-201 PCT Reboil Furnace shall not exceed 50 ppm<sub>dv</sub> corrected to 3% oxygen averaged over any calendar month. This condition shall not apply during start-up and shutdown. [BACT, Cumulative Increase]
4. Instruments shall be installed and operated to continuously monitor the percentage of oxygen and the concentration of nitrogen oxides from the following sources: S43, Unit 200 B-202 Coking Furnace and S44, Unit 200 B-201 PCT Reboil Furnace. [BACT, Cumulative Increase]

**E. S438 Furnace**

1. The S438 furnace shall be abated by the A46 SCR unit at all times, except that S438 may operate without SCR abatement on a temporary basis for periods of planned or emergency maintenance. A District-approved NOx CEM shall monitor and record the S438 NOx emission rate whenever S351 operates without abatement. All emission limits applicable to S438 shall remain in effect whether or not it is operated with SCR abatement. [BACT, Cumulative Increase]
2. Total fuel fired in S438 shall not exceed 2.19 E 12 btu in any rolling consecutive 365 day period. [Cumulative Increase]
3. Pressure swing adsorption (PSA) off gas used as fuel at S438 shall not exceed 1.0 ppm (by weight) total reduced sulfur (TRS). TRS shall include hydrogen sulfide, methyl mercaptan, methyl sulfide, dimethyl disulfide. [BACT, Cumulative Increase]
4. The following emission concentration limits from S438 shall not be exceeded. These limits shall not apply during startup periods not exceeding 24 hours (72 hours when drying refractory or during the first startup following catalyst replacement) and shutdown periods not exceeding 24 hours. The District may approve other startup and shutdown durations.

NOx: 7 ppm<sub>v</sub> @ 3% oxygen, averaged over any 1 hour period

CO: 32 ppm<sub>v</sub> @ 3% oxygen, averaged over any calendar day

POC: 0.0023 lb/MMBtu of fuel used

PM<sub>10</sub> : 0.004 lb/MMBtu of fuel used

[BACT, Cumulative Increase]

5. The concentration of TRS in the blended fuel gas shall not exceed 14 ppm<sub>v</sub> averaged over any calendar month. [SO<sub>2</sub> bubble, Cumulative Increase]
6. Daily records of the type and amount of fuel combusted at S438 and of the TRS and hydrogen sulfide concentration in the blended fuel gas, and monthly records of average blended fuel gas TRS concentration,





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**Source Nos. S-11, S-12, S-13, S-22, S-45, & S-438**

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shall be maintained for at least five years and shall be made available to the District upon request.  
[Cumulative Increase]

7. No later than 90 days from the startup of S438, the owner/operator shall conduct District-approved source tests to determine initial compliance with the limits in Part 4 for NO<sub>x</sub>, CO and POC. The owner/operator shall conduct the source tests in accordance with Part 8. The owner/operator shall submit the source test results to the District staff no later than 60 days after the source test. [BACT, Cumulative Increase]
8. The owner/operator shall obtain approval for all source test procedures from the District's Source Test Section prior to conducting any tests. The owner/operator shall comply with all applicable testing requirements for continuous emissions monitors as specified in Volume V of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test Section, in writing, of the source test protocols and projected test dates at least 7 days prior to testing. [BACT, Cumulative Increase]

**F. S2, S3, S4, S5, S7, S9, S10, S11, S12, S13, Heaters**

1b. Total fuel firing at Unit 240 (S9, S10, S11, S12, and S13) shall not exceed 616.4 MMBtu/hr (based on higher heating value) averaged over any consecutive 12 month period. [Cumulative Increase]

2. Total fuel fired at the MP-30 Complex, including Unit 229 (S2), Unit 230 (S3) and Unit 231 (S4, S5, S7) shall not exceed 346.5 MMBtu/hr (based on higher heating value) averaged over any consecutive 12 month period.  
[Cumulative Increase]

3. Monthly records of the fuel fired at sources in Parts 1 and 2 shall be kept in a District-approved log for at least 5 years and shall be made available the District upon request. [Cumulative Increase]

4. The owner/operator shall not exceed the following NO<sub>x</sub> emission limits as measured by NO<sub>x</sub> CEMs:
- a. S10: 0.015 lb NO<sub>x</sub> per MMBtu heat input based on a 12 consecutive month average.
  - b. S13: 0.015 lb NO<sub>x</sub> per MMBtu heat input based on a 12 consecutive month average.
  - c. S15, S16, S17, S18 and S19 combined: 0.015 lb NO<sub>x</sub> per MMBtu heat input based on a 12 consecutive month average.

[Basis: ConocoPhillips-EPA Consent Decree Case No. H-05-0258]

5. Deleted.

**G. Regulation 9-10 Startup / Shutdown Provisions [Basis: 9-10-301]**

For determining compliance with Regulation 9-10-301, the contribution of each affected unit that is in a startup or shutdown condition shall be based on the methods described in 9-10-301.1, and the contribution of each affected unit that is in an out of service condition shall be based on the methods described in 9-10-301.2. Low-firing conditions (no higher than 20% of a unit's rated capacity), including refractory dryout periods, shall be considered out of service conditions subject to the 30-day averaging procedure in Regulation 9-10-301.2, including the 60-day annual limit for this procedure.

1. Heater S44 (Unit 200, B-201) shall be considered to be in normal operation whenever it has detectable fuel flow, and shall be considered to be out of service for the purpose of Regulation 9-10-301 whenever it has undetectable fuel flow.
2. For heaters S43 (Unit 200, B-202), S351 (Unit 267, B-601/602) and S371/372 (Unit 228, B-520/521), the durations of startups, shutdowns and refractory dryout periods are defined in Condition 1694, Part D.2 (S43), Part B.2 (S351) and Part C.2 (S371, S372).



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**Source Nos. S-11, S-12, S-13, S-22, S-45, & S-438**

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3. For heaters S10 (Unit 240, B-101) and S15 through S19 (Unit 244, B-501 through B-505), the duration of startups, shutdowns and low-firing periods are defined as follows:
  - a. startup and shutdown periods are not to exceed 24 hours
  - b. low-firing periods are not to exceed 72 hours
4. For heater S13 (Unit 240, B-301), the duration of startups, shutdowns and low-firing periods are defined as follows:
  - a. startup and shutdown periods are not to exceed 72 hours
  - b. low-firing periods are not to exceed 72 hours

5. For heaters with no CEMS:

S2 (Unit 229, B-301)

S3 (Unit 230, B-201)

S4 (Unit 231, B-101)

S5 (Unit 231, B-102)

S7 (Unit 231, B-103)

S9 (Unit 240, B-2)

S11 (Unit 240, B-201)

S12 (Unit 240, B-202)

S20 (Unit 244, B-506)

S22 (Unit 248, B-606)

Shutdown in A/N 31157 upon startup

Shutdown in A/N 31157 upon startup

S31 (Unit 200, B-501)

S336 (Unit 231, B-104)

S337 (Unit 231, B-105)

startups, shutdowns, and out of service conditions shall each not exceed 5 days in succession at each source.

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-425, S-426**

**Condition No. 27655**

**Plant No. 21359**

**Application No. 31157**

Conditions For S425, S426, Marine Loading Berths

This condition was amended by Applications 13424, 21342, 22904, 27798, 31703, and 31157 Rodeo Renewed Project (2022).

1. For each loading event of "regulated organic liquid", the owner/operator shall operate A-420 with a temperature of at least 1300 degrees F during the first 15 minutes of the loading operation. After the initial 15 minutes of loading, the A420 temperature shall be at least 1400 degrees F. [Cumulative Increase]
2. The owner/operator of S-425 and/or -426's instruments shall be properly installed and properly maintained per manufacturer's specifications to monitor and record the following:
  - a. Static pressure developed in the marine tank vessel
  - b. A420 temperature.
  - c. Hydrocarbons and flow to determine mass emissions or a concentration measurement alone if it is demonstrated to the satisfaction of the APCO that concentration alone allows verification of compliance, or
  - d. Any other device that verifies compliance, with prior approval from the APCO.[Cumulative Increase]
3. The owner/operator of S-425 and/or S-426 shall not load a "regulated organic liquid" from this facility into a marine tank vessel and/or shall not load any liquid into cargo tank of a marine tank vessel when the tanks' prior cargo was a regulated organic liquid within the District whenever A420 is not fully operational. A420 shall be maintained to be leak free, gas tight, and in good working order. For the purposes of this condition, "operational" shall mean the system is achieving the reductions required by Regulation 8, Rule 44; "regulated organic liquids" include gasoline, gasoline blendstocks, aviation gasoline and JP-4 aviation fuel, renewable naphtha, and crude oil. [Cumulative Increase]
4. The owner/operator of S-425 and/or S-426 shall ensure a leak test shall be conducted on all vessels loading under positive pressure prior to loading more than 20% of the cargo. The leak test shall include all vessel relief valves, hatch cover, butterworth plates, gauging connections, and any other potential leak points. [Cumulative Increase]
5. The owner/operator of S-425 and/or S-426 shall ensure the loading pressure shall not exceed 80% of the lowest relief valve set pressure of the vessel being loaded. [Cumulative Increase]
6. The owner/operator of each S-425 or S-426 and combined S-425 and S-426 shall not load more than the following throughput per day on a 365-day average basis:
  - a. No more than 25,000 barrels of gasoline, gasoline blending stocks, aviation gas, naphtha, renewable naphtha, aviation fuel (JP-4 type), and C5/C6 combined.
    - 25,000 barrels of renewable feedstocks
    - 67,000 barrels of renewable diesel(Basis: Cumulative Increase)
  - i. Deleted Application 13690
  - ii. Deleted Application 31157, lightering is no longer used.
  - b. When A420 is loading regulated materials in accordance with Part 1 above, the owner/operator of S425 and/or S426 shall ensure the maximum loading rate at any time at both S425 and S426 combined shall not exceed 20,000 barrels per hour to prevent overloading the A420 oxidizer. [Cumulative Increase]
7. Deleted per Application 31157, S-425 and S-426 will stop receiving crude oil and gas oil. (Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative increase)



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-425, S-426**

**Condition No. 27655**

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8. All throughput records required to verify compliance with Parts 6a and 6b, including hourly loading rate records (total for S425, S426), and maintenance records required for A420, which are subject to Regulation 8, Rule 44, shall be kept on site for at least 5 years and made available to the Air District upon request. [Cumulative Increase]
9. The destruction efficiency of the A420 control system shall be at least 98.5% by weight over each loading event for gasoline, gasoline blending stocks, aviation gas, renewable naphtha, and aviation fuel (JP-4 type). . [BACT]
10. Deleted Application 27798.
11. Deleted Application 27798.
12. Deleted Application 27798.
13. Deleted Application 27798.
14. Deleted Application 22906
15. The owner/operator of each S-425 or S-426 and S-425 and S-426 combined shall not exceed 467 lbs of POC per calendar day, and/or 10.206 tons of POC during any consecutive rolling 12-month period.  
(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative increase)
16. The owner/operator of each S-425 and/or S-426 and S-425 and S-426 combined shall not load more than the following maximum throughput per calendar day:
  - 145,400 barrels of gasoline, gasoline blending stocks, aviation gas, renewable naphtha, and aviation fuel (JP-4 type) combined,
  - 113,100 barrels of renewable feedstocks,
  - 145,400 barrels of renewable diesel(Basis: Regulation 2-2-208 Cumulative Increase)
17. To determine compliance with the above condition(s), the owner/operator shall maintain the following records and provide all of the data necessary to evaluate compliance with the above conditions, including, but not necessarily limited to, the following information:
  - a. Date and time of unloading and loading operations at each S-425 and/or S-426 and for S-425 and S-426 combined
  - b. On a daily basis, type and amount material unloaded and loaded at each S-425 and/or S-426 and for S-425 and S-426 combined;
  - c. Records of all lab analysis and source test results of vapor pressure and emission factors of loading materials at each S-425 and/or S-426 and for S-425 and S-426 combined;
  - d. Hourly records of loading rate per Part 6b;
  - e. Monthly records of the number of tanker and ship deliveries of each material, totaled on a consecutive 12 month basis.

These records shall be kept on-site for at least 5 years. All records shall be recorded in a District approved log and made available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable Air District Regulations.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 1-441)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-449**

**Condition No. 27656**

**Plant No. 21359**

**Application No. 31157**

CONDITIONS FOR S449, TANK (T-285)- Rodeo Renewed Project startup, Application 31157 (2022).

1. The owner/operator shall ensure the emissions from S449 shall be collected and vented to the refinery Vapor Recovery System A-7 or other Air District's approved abatement devices, which provide at least 98% abatement of VOC emissions by weight. [Basis: Cumulative Increase, Regulation 1-107]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-254, S-256, S-257, & S-338**

**Condition No. 27657**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance - Phillips 66 Rodeo Renewed Project) - Established throughputs for previously grandfathered sources. These sources are no longer grandfathered sources with these established limits.

S-254 Tank No. 1001

S-256 Tank No. 1003

S-257 Tank No. 1004

S-338 U233 Fuel Gas Center

1. The owner/operator of S-254 shall ensure that the gasoline, renewable diesel and renewable jet combined does not exceed 7,257,233 barrels in any consecutive rolling 12-month period and/or 138,362 barrels in any calendar day.  
(Basis: Regulation 2-1-234.1.2, Regulation 2-1-234.2, Regulation 2-1-403 Permit Conditions)
- a. The owner/operator of S-254 may store alternate organic liquid(s) other than the materials specified in Part 1 and/or usages in excess of those specified in Part 1 provided that the owner/operator can demonstrate that all of the following are satisfied:
  - i. Total POC emissions from S-254 do not exceed 2.040 tons in any consecutive rolling twelve month period and/or 21 pounds in any calendar day;
  - ii. Total NPOC emissions from S-254 shall be zero;
  - iii. The use of these materials does not increase toxic emissions to equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.(Basis: Regulation 2-1-234.1.2, Regulation 2-1-234.2, Regulation 2-1-403 Permit Conditions; Regulation 2-5 Toxics)
2. The owner/operator of S-256 shall ensure that the gasoline, renewable diesel and renewable jet combined does not exceed 4,024,700 barrels in any consecutive rolling 12-month period and/or 111,383 barrels in any calendar day.  
(Basis: Regulation 2-1-234.1.2, Regulation 2-1-234.2, Regulation 2-1-403 Permit Conditions)
- a. The owner/operator of S-256 may store alternate organic liquid(s) other than the materials specified in Part 2 and/or usages in excess of those specified in Part 2 provided that the owner/operator can demonstrate that all of the following are satisfied:
  - i. Total POC emissions from S-256 do not exceed 0.303 tons in any consecutive rolling twelve month period and/or 20 pounds in any calendar day;
  - ii. Total NPOC emissions from S-256 shall be zero;
  - iii. The use of these materials does not increase toxic emissions to equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.(Basis: Regulation 2-1-234.1.2, Regulation 2-1-234.2, Regulation 2-1-403 Permit Conditions ; Regulation 2-5 Toxics)
3. The owner/operator of S-257 shall ensure that the gasoline, renewable diesel and/or renewable jet combined does not exceed 3,568,973 barrels in any consecutive rolling 12-month period and/or 42,438 barrels in any calendar day.  
(Basis: Regulation 2-1-234.1.2, Regulation 2-1-234.2, Regulation 2-1-403 Permit Conditions)
- a. The owner/operator of S-257 may store alternate organic liquid(s) other than the materials specified in Part 3 and/or usages in excess of those specified in Part 3 provided that the owner/operator can demonstrate that all of the following are satisfied:
  - i. Total POC emissions from S-257 do not exceed 0.178 tons in any consecutive rolling twelve month period and/or 6 pounds in any calendar day;
  - ii. Total NPOC emissions from S-257 shall be zero;





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-254, S-256, S-257, & S-338**

**Condition No. 27657**

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- iii. The use of these materials does not increase toxic emissions to equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.  
(Basis: Regulation 2-1-234.1.2, Regulation 2-1-234.2, Regulation 2-1-403 Permit Conditions; Regulation 2-5 Toxics)
4. The owner/operator of S-338 shall ensure that the fuel gas throughput does not exceed 10,015 MMscf in any consecutive rolling 12-month period and/or 31.77 MMscf in any calendar day.  
(Basis: Regulation 2-1-234.1.2, Regulation 2-1-234.2, Regulation 2-1-403 Permit Conditions)
5. To determine compliance with the above condition(s), the owner/operator of S-254, S-256, S-257 and/or S-338 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above conditions, including, but not necessarily limited to, the following information:
  - a. Daily and monthly record of the type, amount of throughput and emission calculations (for POC, NPOC and/or TACs, if required) at each source, totaled on a rolling 12-month period

These records shall be kept on-site for at least 5 years. All records shall be recorded in an Air District approved log and made available for inspection by Air District staff upon request. These recordkeeping Requirements shall not replace the recordkeeping Requirements contained in any applicable Air District Regulations.

(Basis: Regulation 2-1-234.1.2, Regulation 2-1-234.2, Regulation 2-1-403 Permit Conditions, Regulation 1-441)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-307, S-318, S-322, S-434, S-437, S-599, & S-600**

**Condition No. 27658**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance): Phillips 66 Rodeo Renewed Project.

Conditions for Fugitive Components installed as part of the Rodeo Renewed Project:

S-307 U240

S-322 U40

S-434 U246

S-437 U110

S-599 Sulfur Treatment Unit

S-600 Pretreatment Unit

S-318 U76

1. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall install only the following types of valves: (1) bellows sealed, (2) live loaded, (3) graphitic packed, and/or (4) quarter-turn (e.g., ball valves or plug valves), or equivalent as determined by the APCO.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-301 BACT, Regulation 2-2-302 Offsets)
2. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall comply with a leak standard of 100 ppm of Total Organic Compounds (TOC) measured as C1 at any valve installed unless the owner/operator complies with the applicable leak minimization and repair provisions contained in Regulation 8-18. All valves shall be subject to the Part 17 inspection frequency.  
(Basis: Regulation 2-2-301 BACT)
3. The owner/operator of, S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall install graphitic-based gaskets on all flanges or connectors (gasketed) or equivalent as determined by the APCO. (Basis: Regulation 2-2-301 BACT)
4. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall comply with a leak standard of 100 ppm of TOC (measured as C1) at any flanges/connectors unless the owner/operator complies with the applicable leak minimization and repair provisions contained in Regulation 8-18. All flanges/connectors shall be subject to the Part 17 inspection frequency. (Basis: Regulation 2-2-301 BACT)
5. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall install double mechanical seals w/ barrier fluid; magnetically coupled pumps; canned pumps; magnetic fluid sealing technology; seal system with leakage vented to thermal oxidizer; or other BAAQMD approved equivalent control device; or Air District approved control technology as determined by the APCO on all new/replaced pumps. All pumps shall be subject to the Part 17 inspection frequency. (Basis: Regulation 2-2-301 BACT)
6. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 (58 pumps at 100 ppmv) and/or S-318 shall comply with a leak standard of 100 ppm of TOC (measured as C1) at any pump unless the owner/operator complies with the applicable leak minimization and repair provisions contained in Regulation 8-18. (Basis: Regulation 2-2-301 BACT)
7. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall install double mechanical seals w/ barrier fluid; or gas seal system vented to a thermal oxidizer or other BAAQMD approved control device; or Air District approved control technology as determined by the APCO on all new/replaced compressors. All compressors shall be subject to the Part 17 inspection frequency.  
(Basis: Regulation 2-2-301 BACT)



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-307, S-318, S-322, S-434, S-437, S-599, & S-600**

**Condition No. 27658**

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8. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall comply with a leak standard of 100 ppm of TOC (measured as C1) at any compressor unless the owner/operator complies with the applicable leak minimization and repair provisions contained in Regulation 8-18.  
(Basis: Regulation 2-2-301 BACT)
9. The owner/operator shall implement the following for each new and/or replaced pressure vapor relief device (PRD) installed at S-307, S-434 and/or S-437 abated by the A-7 fuel gas system, furnace, or flare with a minimum capture and destruction efficiency of at least 98% by weight.
  - a. The owner/operator shall operate an Air District approved continuous monitoring system that detects PRD discharges to the fuel gas recovery system or flare. Acceptable monitoring methods include, but are not limited to, continuous pressure, temperature, flow, or molecular weight measurement provided that the monitoring type is Air District approved.
  - b. When a PRD discharge is detected and the PRD does not reseal, the owner/operator shall attempt to reseal, repair and/or replace the PRD as soon as possible while taking into account both safety and feasibility concerns. If the owner/operator determines, subject to Air District verification, the PRD cannot be safely resealed, repaired and/or replaced without causing a process unit or equipment shutdown, the owner/operator shall repair or replace the PRD at the next planned process unit turnaround.
  - c. No later than 90 days before the startup of any equipment of the Rodeo Renewed Project, the owner/operator shall develop and maintain a Pressure Relief Device (PRD) Leak Detection and Troubleshooting Guideline that details the site-specific response procedures that will be employed to minimize PRD discharge as much as practicable. The Guideline shall be made available to the Air District for inspection.
  - d. To determine compliance with the above conditions, the owner/operator of S- S-307, S-434 and/or S-437 shall maintain the following records and provide all of the data necessary to evaluate compliance with condition b:
    - i. Date of each PRD discharge detected that does not reseal ;
    - ii. Date of final repair or replacement;
    - iii. List of each PRD in which repair has been delayed to the next planned process unit turnaround;
    - iv. Reason for non-repairable determination; and
    - v. Documentation of any safety and/or feasibility concerns associated with any repair or replacement.

(Basis: Regulation 2-2-301 BACT, Regulation 8-18-301 Leaks, Regulation 8-28 Episodic Releases, Regulation 2-5 Toxics)
10. The owner/operator shall implement the following for each new and/or replaced liquid pressure relief device (PRD) installed at S-600 connected to the process drain and recycled back to the inlet of S-600.
  - a. The owner/operator shall operate an Air District approved continuous monitoring system that detects PRD discharges. Acceptable monitoring methods include, but are not limited to, continuous pressure, temperature, flow, or liquid level provided that the monitoring type is Air District approved.
  - b. When a PRD discharge is detected and the PRD does not reseal, the owner/operator shall attempt to reseal, repair and/or replace the PRD as soon as possible while taking into account both safety and feasibility concerns. If the owner/operator determines, subject to Air District verification, the PRD cannot be safely resealed, repaired and/or replaced without causing a process unit or equipment shutdown, the owner/operator shall repair or replace the PRD at the next planned process unit turnaround.
  - c. No later than 90 days before the startup of any equipment of the Rodeo Renewed Project, the owner/operator shall develop and maintain a Pressure Relief Device (PRD) Leak Detection and Troubleshooting Guideline that details the site-specific response procedures that will be employed to



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-307, S-318, S-322, S-434, S-437, S-599, & S-600**

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minimize PRD discharge as much as practicable. The Guideline shall be made available to the Air District for inspection.

- d. To determine compliance with the above conditions, the owner/operator of S-600 shall maintain the following records and provide all of the data necessary to evaluate compliance with condition b:
- i. Date of each PRD discharge detected that does not reseal;
  - ii. Date of final repair or replacement;
  - iii. List of each PRD in which repair has been delayed to the next planned process unit turnaround;
  - iv. Reason for non-repairable determination; and
  - v. Documentation of any safety and/or feasibility concerns associated with any repair or replacement.

(Basis: Regulation 2-2-301 BACT, Regulation 8-18-301 Leaks, Regulation 8-28 Episodic Releases, Regulation 2-5 Toxics)

11. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall identify all new/replaced valves, connectors, pressure relief devices, compressors, and pumps with a unique permanent identification code and shall include all new/replaced fugitive equipment in the fugitive equipment monitoring and repair program. The owner/operator shall monitor all repaired equipment within 24 hours of the repair. The unique permanent identification code does not apply to quarter-inch or less tubing and connectors associated with analytical sampling systems. (Basis: Regulation 8-18-402 Identification)

12. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 has been permitted to install new and/or replace the following number of TOC service fugitive components for the Rodeo Renewed Project:

3,929 valves  
12,617 connectors  
161 PSV's/PRV's  
3 process drains  
223 pumps

(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 2-5 Toxics)

13. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall not exceed 10.421 tons per year of TOC emissions (measured as C1) from all fugitive component counts installed in Part 12. Compliance with this provision shall be verified quarterly using methods described in Part 15. The results shall be submitted to the Air District within 30 days of the close of each calendar quarter after commencing with start-up of the system. The owner/operator shall keep records of fugitive component counts (including the unique permanent identification codes) and corresponding TOC emissions for at least five years from date of entry. For the purposes of these conditions POC/NMOC emissions shall be considered equal to the TOC emissions are determined by the Regulations 2-2 and 8-18 LDAR program. (Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 2-5 Toxics, Regulation 8-18)

14. Within 30 days of the completion of the installation of all fugitive components for each subpart in Part 12, the owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall submit a final component counts for each source, final component counts for the Rodeo Renewed Project, and TOC emissions estimate using the approved methods within these conditions to the Air District. Any new and/or replaced components shall be included as installed. If any of the fugitive component counts exceed or is less than a count stated above, the plant's cumulative increase emissions shall be adjusted as needed, subject to APCO approval, to reflect only the difference between emissions based on predicted component counts versus actual component counts. The amount of refund or additional offsets shall be



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handled or provided before issuance of the permit to operate. (Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 8-18)

15. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall calculate fugitive emissions utilizing only Air District approved methods. For all components, the owner/operator shall use the California Air Pollutant Control Officers Association (CAPCOA) correlation equations, midpoint method, default zero factors, 10,000 ppm pegged factors and/or other method approved by the Air District. The owner/operator shall include emissions estimates from all fugitive components associated with this application in order to demonstrate compliance with Parts 13 and 18 through 24. The quarterly fugitive emissions calculations shall start upon installation of any new/replaced components identified in part 12 with the results being submitted to the Air District within 30 days of the close of each quarter. (Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-301 BACT, Regulation 2-2-302 Offsets, Regulation 8-18)
16. Not more than 180 days after the start-up of S S-307, S-322, S-434, S-437, and/or S-318, the owner/operator shall provide the Air District's Engineering Division with toxic emissions calculations based on the final count of fugitive components and the renewable feedstocks and products for removed, replaced and installed fugitive components. The owner/operator shall ensure that the weighted toxicity for fugitive components for each source is not increased above the pre-project emissions levels authorized under the permit Application 31157 at the time of issuance. (Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-5 Toxics)
17. The owner/operator of S-307, S-322, S-434, S-437, S-599, S-600 and/or S-318 shall conduct inspections of fugitive components of these conditions in accordance with the frequency below:

Valves:	Quarterly
Connectors:	Biannual (twice a year)
Flanges:	Biannual (twice a year)
Pressure Relief Valves:	Quarterly
Compressors:	Quarterly
Pumps:	Quarterly
Process Drains:	Quarterly

(Basis: Regulation 2-2-301 BACT)
18. The owner/operator of S-307 (Unit 240) has been permitted for the following total number of TOC service fugitive components:
  - 5,725 valves
  - 9,880 connectors
  - 56 PSV's/PRV's
  - 390 others
  - 54 pumps

Source S-307 may exceed the component counts specified above provided that both the emissions from all fugitive components added and/or replaced qualify for the exemption under Regulation 2-1-128.21. The owner/operator of S-307 shall submit an application to update the fugitive counts above, to update the mass emission limits both above (Part 13) and the paragraph below, to confirm that BACT has been satisfied, and to provide offsets for the new/replaced components. The potential to emit of the added and/or replaced fugitive components shall be calculated according to Regulation 8-18 requirement and shall be used to determine the offsets due. The application shall be submitted to the Air District by the end of January for the previous calendar year's component counts added and/or replaced. Any new and/or replaced components shall be included and reported as required by Parts 15 and/or 16.



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The owner/operator of S-307 shall not exceed 56.6lbs per day and/or 10.327 tons per year of TOC emissions (measured as C1) from all fugitive components included in the above counts. Compliance with this provision shall be verified quarterly using methods described in Part 15. The results shall be submitted to the Air District within 30 days of the close of each calendar quarter after commencing with start-up of any equipment included as part of Application 31157. The owner/operator shall keep records of fugitive component counts, unique identification numbers, and corresponding TOC emissions for at least five years from date of entry. For the purposes of these conditions POC/NMOC emissions shall be considered equal to the TOC emissions are determined by the Regulations 2-2 and 8-18 LDAR program. (Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 8-18)

19. The owner/operator of S-322 (Unit 40) has been permitted for the following total number of TOC service fugitive components:
- 2,707 valves
  - 3,226 connectors
  - 135 PSV's/PRV's
  - 236 others
  - 40 pumps

Source S-322 may exceed the component counts specified above provided that both the emissions from all fugitive components added and/or replaced qualify for the exemption under Regulation 2-1-128.21. The owner/operator of S-322 shall submit an application to update the fugitive counts above, to update the mass emission limits both above (Part 13) and the paragraph below, to confirm that BACT has been satisfied, and to provide offsets for the new/replaced components. The potential to emit of the added and/or replaced fugitive components shall be calculated according to Regulation 8-18 requirement and shall be used to determine the offsets due. The application shall be submitted to the Air District by the end of January for the previous calendar year's component counts added and/or replaced. Any new and/or replaced components shall be included and reported as required by Parts 15 and/or 16.

The owner/operator of S-322 shall not exceed 28.3lbs per day and/or 5.167 tons per year of TOC emissions (measured as C1) from all fugitive components included in the above counts. Compliance with this provision shall be verified quarterly using methods described in Part 15. The results shall be submitted to the Air District within 30 days of the close of each calendar quarter after commencing with start-up of any equipment covered by Application 31157. The owner/operator shall keep records of fugitive component counts, unique identification numbers, and corresponding TOC emissions for at least five years from date of entry. For the purposes of these conditions the TOC emissions are determined by the Regulations 2-2 and 8-18 LDAR program. (Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 8-18)

20. The owner/operator of S-434 (U246) has been permitted for the following total number of TOC service fugitive components:
- 2,687 valves
  - 3,607 connectors
  - 24 PSV's/PRV's
  - 217 others
  - 18 pumps

Source S-434 may exceed the component counts specified above provided that both the emissions from all fugitive components added and/or replaced qualify for the exemption under Regulation 2-1-128.21. The owner/operator of S-434 shall submit an application to update the fugitive counts above, to update the mass emission limits both above (Part 13) and the paragraph below, to confirm that BACT has been satisfied, and to provide offsets for the new/replaced components. The potential to emit of the added and/or replaced





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fugitive components shall be calculated according to Regulation 8-18 requirement and shall be used to determine the offsets due. The application shall be submitted to the Air District by the end of January for the previous calendar year's component counts added and/or replaced. Any new and/or replaced components shall be included and reported as required by Parts 15 and/or 16.

The owner/operator of S-434 shall not exceed 23.3lbs per day and/or 4.241 tons per year of TOC emissions (measured as C1) from all fugitive components included in the above counts. Compliance with this provision shall be verified quarterly using methods described in Part 15. The results shall be submitted to the Air District within 30 days of the close of each calendar quarter after commencing with start-up of any equipment included as part of Application 31157. The owner/operator shall keep records of fugitive component counts, unique identification numbers, and corresponding TOC emissions for at least five years from date of entry. For the purposes of these conditions POC/NMOC emissions shall be considered equal to the TOC emissions are determined by the Regulations 2-2 and 8-18 LDAR program.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 8-18)

21. The owner/operator of S-437 (U110) has been permitted for the following total number of TOC service fugitive components:

- 981 valves
- 1,470 connectors
- 23 PSV's/PRV's
- 108 others
- 2 pumps

Source S-437 may exceed the component counts specified above provided that both the emissions from all fugitive components added and/or replaced qualify for the exemption under Regulation 2-1-128.21. The owner/operator of S-437 shall submit an application to update the fugitive counts above, to update the mass emission limits both above (Part 13) and the paragraph below, to confirm that BACT has been satisfied, and to provide offsets for the new/replaced components. The potential to emit of the added and/or replaced fugitive components shall be calculated according to Regulation 8-18 requirement and shall be used to determine the offsets due. The application shall be submitted to the Air District by the end of January for the previous calendar year's component counts added and/or replaced. Any new and/or replaced components shall be included and reported as required by Parts 15 and/or 16.

The owner/operator of S-437 shall not exceed 9.0 lbs per day and/or 1.641 tons per year of TOC emissions (measured as C1) from all fugitive components included in the above counts. Compliance with this provision shall be verified quarterly using methods described in Part 15. The results shall be submitted to the Air District within 30 days of the close of each calendar quarter after commencing with start-up of any equipment covered by Application 31157. The owner/operator shall keep records of fugitive component counts, unique identification numbers, and corresponding TOC emissions for at least five years from date of entry. For the purposes of these conditions POC/NMOC emissions shall be considered equal to the TOC emissions are determined by the Regulations 2-2 and 8-18 LDAR program.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 8-18)

22. The owner/operator of S-599 (STU) has been permitted for the following total number of TOC service fugitive components:

- 280 valves
- 1,120 connectors

Source S-599 may exceed the component counts specified above provided that both the emissions from all fugitive components added and/or replaced qualify for the exemption under Regulation 2-1-128.21. The owner/operator of S-599 shall submit an application to update the fugitive counts above, to update the mass



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-307, S-318, S-322, S-434, S-437, S-599, & S-600**

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emission limits both above (Part 13) and the paragraph below, to confirm that BACT has been satisfied, and to provide offsets for the new/replaced components. The potential to emit of the added and/or replaced fugitive components shall be calculated according to Regulation 8-18 requirement and shall be used to determine the offsets due. The application shall be submitted to the Air District by the end of January for the previous calendar year's component counts added and/or replaced. Any new and/or replaced components shall be included and reported as required by Parts 15 and/or 16.

The owner/operator of S-599 shall not exceed 3.74 lbs per day and/or 0.682 tons per year of TOC emissions (measured as C1) from all fugitive components included in the above counts. Compliance with this provision shall be verified quarterly using methods described in Part 15. The results shall be submitted to the Air District within 30 days of the close of each calendar quarter after commencing with start-up of any equipment included as part of Application 31157. The owner/operator shall keep records of fugitive component counts, unique identification numbers, and corresponding TOC emissions for at least five years from date of entry. For the purposes of these conditions POC/NMOC emissions shall be considered equal to the TOC emissions are determined by the Regulations 2-2 and 8-18 LDAR program.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 8-18)

23. The owner/operator of S-600 (PTU) has been permitted for the following total number of TOC service fugitive components:
- 3,049 valves
  - 9,144 connectors
  - 156PSV's/PRV's
  - 212 pumps (154 pumps at 50 ppmv, 58 pumps at 100 ppmv)

Source S-600 may exceed the component counts specified above provided that both the emissions from all fugitive components added and/or replaced qualify for the exemption under Regulation 2-1-128.21. The owner/operator of S-600 shall submit an application to update the fugitive counts above, to update the mass emission limits both above (Part 13) and the paragraph below, to confirm that BACT has been satisfied, and to provide offsets for the new/replaced components. The potential to emit of the added and/or replaced fugitive components shall be calculated according to Regulation 8-18 requirement and shall be used to determine the offsets due. The application shall be submitted to the Air District by the end of January for the previous calendar year's component counts added and/or replaced. Any new and/or replaced components shall be included and reported as required by Parts 15 and/or 16.

The owner/operator of S-600 shall not exceed 44.68 lbs per day and/or 8.154 tons per year of TOC emissions (measured as C1) from all fugitive components included in the above counts. Compliance with this provision shall be verified quarterly using methods described in Part 15. The results shall be submitted to the Air District within 30 days of the close of each calendar quarter after commencing with start-up of any equipment included as part of Application 31157. The owner/operator shall keep records of fugitive component counts, unique identification numbers, and corresponding TOC emissions for at least five years from date of entry. For the purposes of these conditions the TOC emissions are determined by the Regulations 2-2 and 8-18 LDAR program.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 8-18)

24. The owner/operator of S-318 (Unit 76) has been permitted for the following total number of TOC service fugitive components:
- 3,314 valves
  - 5,814 connectors
  - 120 PSV's/PRV's
  - 214 others
  - 49 pumps



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-307, S-318, S-322, S-434, S-437, S-599, & S-600**

**Condition No. 27658**

**Plant No. 21359**

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Source S-318 may exceed the component counts specified above provided that both the emissions from all fugitive components added and/or replaced qualify for the exemption under Regulation 2-1-128.21. The owner/operator of S-318 shall submit an application to update the fugitive counts above, to update the mass emission limits both above (Part 13) and the paragraph below, to confirm that BACT has been satisfied, and to provide offsets for the new/replaced components. The potential to emit of the added and/or replaced fugitive components shall be calculated according to Regulation 8-18 requirement and shall be used to determine the offsets due. The application shall be submitted to the Air District by the end of January for the previous calendar year's component counts added and/or replaced. Any new and/or replaced components shall be included and reported as required by Parts 15 and/or 16.

The owner/operator of S-318 shall not exceed 58.8 lbs per day and/or 6.847 tons per year of TOC emissions (measured as C1) from all fugitive components included in the above counts. Compliance with this provision shall be verified quarterly using methods described in Part 14. The results shall be submitted to the Air District within 30 days of the close of each calendar quarter after commencing with start-up of any equipment included as part of Application 31157. The owner/operator shall keep records of fugitive component counts, unique identification numbers, and corresponding TOC emissions for at least five years from date of entry. For the purposes of these conditions POC/NMOC emissions shall be considered equal to the TOC emissions are determined by the Regulations 2-2 and 8-18 LDAR program.  
(Basis: Regulation 2-2-208 Cumulative Increase, Regulation 2-2-302 Offsets, Regulation 8-18)

25. The owner/operator of 154 pumps at S-600 (PTU) may or may not initially install double mechanical seals w/ barrier fluid; magnetically coupled pumps; canned pumps; magnetic fluid sealing technology; seal system with leakage vented to thermal oxidizer; or other BAAQMD approved equivalent control device; or Air District approved control technology as determined by the APCO on all pumps. The owner/operator shall install mechanical seals or Air District approved equivalent technology on all 154 pumps.

The owner/operator of S-600 shall identify the 154 pumps with a unique permanent identification code and shall include in the fugitive equipment monitoring and repair program.

All pumps shall be subject to the Part 17 inspection frequency. The 154 pumps that are not a type listed in Part 5 and for which a leak greater than 50 ppm (measured as C1) has been determined, and if the leak remains greater than 50 ppm (measured as C1) after repair, or if the pump is determined to have a leak greater than 50 ppm (measured as C1) a second time within a 5-year period, then the owner/operator shall install the pump with a type listed in Part 5.

(Basis: Cumulative increase, Regulation 2-2-301 BACT)

26. The owner/operator of the 154 pumps at S-600 that are in heavy liquid service shall comply with a leak standard of 50 ppm of TOC (measured as C1) at any pump unless the owner/operator complies with the applicable leak minimization and repair provisions below.
- Leak minimization includes but is not limited to reducing the leak to the lowest achievable level using best modern practices and without shutting down the process the pump serves. If the leak has been discovered by the operator, minimized within 24 hours and repaired within 7 days or if the leak has discovered by the APCO, the leak must be repaired within 24 hours.
  - Leak repair is tightening, adjustment, addition of material, or the replacement of the equipment using best modern practices, which reduces the leakage to the atmosphere below 50 ppm of TOC.

(Basis: Cumulative increase, Regulation 2-2-301 BACT)

### ***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-11, S-12, S-13, S-22, S-45, S-101, S-352, S-353, S-354, S-355, S-356, S-357, & S-438**

**Condition No. 27659**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance): Phillips 66 Rodeo Renewed Project.

S-11 U240 B-201 Heater  
S-12 U240 B-202 Heater  
S-13 U240 B-301 Heater  
S-22 U248 B-606 Heater  
S-45 U246 B-801 A/B Heater  
S-352 Combustion Turbine (16.6 MW)  
S-353 Combustion Turbine (16.6 MW)  
S-354 Combustion Turbine (16.6 MW)  
S-355 Supplement Duct Burner  
S-356 Supplement Duct Burner  
S-357 Supplement Duct Burner  
S-438 U110\_H-1 Furnace (H2 Plant Reforming)

1. The owner/operator of S-11, S-12, S-13, S-22, S-352, S-353, S-354, S-355, S-356, and/or S-357 shall not burn any fuel gas having Total Sulfur (TS) greater than 432 ppmv in any consecutive rolling 12-month average. The owner/operator of S-11, S-12, S-13, S-22, S-45, S-352, S-353, S-354, S-355, S-356, S-357, and/or S-438 shall not burn any fuel gas having Total Sulfur (TS) greater than 792 ppmv in any calendar day. (Basis: Regulation 2-2-208 Cumulative Increase; Regulation 2-1-403 Permit Condition, Regulation 2-5 Toxics)

2. The owner/operator of S-11, S-12, S-13, S-22, S-352, S-353, S-354, S-355, S-356, and/or S-357 shall test for Total Sulfur (TS) concentration of the fuel gas by GC analysis or an Air District approved method at least once per 8-hr shift (3 times per calendar day). The results shall be submitted to the Air District's Compliance Division in a table format each calendar month, with a separate entry for each daily average no later than 30 days of the end of each calendar month.

(Basis: Regulation 2-2-208 Cumulative Increase)

3. For the purpose of demonstrating compliance with the H<sub>2</sub>S limit in 40 CFR 60.104(a)(1), The owner/operator of S-11, S-12, S-13, S-22 and/or S-45 shall test the fuel gas prior to combustion at S-11, S-12, S-13, S-22 and/or S-45 to determine total H<sub>2</sub>S concentration at least once per 8 hour shift (3 times per calendar day). At least 90% of these samples shall be taken each calendar month. No readable samples or sample results shall be omitted. Records of H<sub>2</sub>S monitoring shall be kept for at least five years after the date the record was made. The owner/operator shall submit a semi-annual report regarding this monitoring to the Air District's Compliance and Enforcement and Engineering Divisions. The reporting periods shall start on January 1st and July 1st of each year. The reports shall be submitted by January 31st and July 31st of each year. If the limit has not been exceeded during the reporting period, this information shall be stated in the report. If the limit has been exceeded, the owner/operator shall report the date and time that the exceedance began and the date and time that the exceedance ended. The owner operator shall estimate and report the excess emissions during the exceedance. [Basis: Regulation 2-1-403 Permit Conditions, 40 CFR 60.13(i)]

4. To determine compliance with the above parts, the owner/operator of S-11, S-12, S-13, S-22, S-352, S-353, S-354, S-355, S-356, S-357, and/or S-438 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:

- a. Total Sulfur (TS) and H<sub>2</sub>S concentration
- b. Type of feedstock used during the sampling and testing;
- c. Feed/Processing Rate; and
- d. Date and time of sampling and testing
- e. Daily average TS calculations and consecutive 12-month average TS concentrations.

All records shall be retained on-site for five years, from the date of entry, and made available for inspection by Air District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable Air District Regulations.



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-11, S-12, S-13, S-22, S-45, S-101, S-352, S-353, S-354, S-355, S-356, S-357, & S-438**

**Condition No. 27659**

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(Basis: Regulation 2-2-208 Cumulative Increase)

5. Within 180 days of the startup of any one of the following sources for each group (Group 1: S-11, S-12, S-13, S-22, and/or S-45), (Group 2: S-352, S-353, S-354, S-355, S-356, and/or S-357), and/or (Group 3: S-438), the owner/operator shall conduct source testing to develop Air District approved fuel gas combustion emissions factors for each group (Groups 1, 2, and 3) in lbs of TAC/MMBtu for the following toxic air contaminant pollutants: Sulfuric Acid, AH (as B(a)P-equivalent), Ammonia, 1,4-Dichlorobenzene(p), Acetaldehyde, Arsenic, Benzene, Beryllium, Cadmium, Chromium (hexavalent), Copper, Cyanide and compounds, Ethyl benzene, Formaldehyde, Hexane, Hydrochloric acid, Hydrogen sulfide, Lead, Manganese, Mercury, Naphthalene, Nickel, Phenol, Propylene, Selenium, Toluene, Vanadium, and Xylenes. The owner/operator shall use the following test methods in the table below, or other Air District approved test methods. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing.

Pollutant	Test Method
Sulfuric Acid	EPA Method 8
PAH (as B(a)P-equivalent)	CARB 429
Ammonia	BAAQMD ST-1B
1,4-Dichlorobenzene(p)	EPA Method TO-15
Acetaldehyde	CARB 430
Arsenic	EPA Method 29
Benzene	EPA Method TO-15
Beryllium	EPA Method 29
Cadmium	EPA Method 29
Chromium (hexavalent)	CARB 425
Copper	EPA Method 29
Cyanide and compounds	CARB Method 426
Ethyl benzene	EPA Method TO-15
Formaldehyde	CARB 430
Hexane	EPA Method TO-15
Hydrochloric acid	EPA Method 26A
Hydrogen sulfide	EPA Method 11
Lead	EPA Method 29
Manganese	EPA Method 29
Mercury	EPA Method 29
Naphthalene	CARB 429
Nickel	EPA Method 29
Phenol	EPA Method TO-15
Propylene	EPA Method TO-15



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-11, S-12, S-13, S-22, S-45, S-101, S-352, S-353, S-354, S-355, S-356, S-357, & S-438**

**Condition No. 27659**

**Plant No. 21359**

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Selenium	EPA Method 29
Toluene	EPA Method TO-15
Vanadium	EPA Method 29
Xylenes (isomers and mixture)	EPA Method TO-15

Prior to the issuance of the Permit to Operate for the sources above, fuel gas combustion emission factors from source testing shall be used to verify emission factors used in the engineering evaluation for the issuance of the Authority to Construct. If source testing results indicate an increase in any toxic air contaminants and/or identify any new toxic air contaminants not previously evaluated as part of the issuance of the Authority to Construct, the health risk assessment (HRA) shall be updated in order to verify compliance with Regulation 2, Rule 5 prior to the issuance of the Permit to Operate

(Basis: Regulation 2-2-208 Cumulative Increase; Regulation 2-5 Toxics)

6. Within 180 days of the startup of source S-45, the owner/operator shall conduct an initial source test to demonstrate compliance with Condition 22962, Part 4 requirements for NO<sub>x</sub>, CO, POC, PM<sub>10</sub>, Condition 22962, Part 5 for Ammonia and Condition 22970, Part 2 for sulfuric acid. The owner/operator shall use only Air District approved test methods. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase)

7. Within 180 days of the startup of sources S-11, S-12, S-13 and/or S-22, the owner/operator shall conduct an initial and annual source tests thereafter to demonstrate compliance with Condition 1694, Part 4 requirement for SO<sub>2</sub>. The owner/operator shall use only Air District approved test methods. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase)

8. Within 180 days of the startup of source S-438, the owner/operator shall conduct an initial and annual source tests thereafter to demonstrate compliance with Condition 1694, Part E4 requirements for NO<sub>x</sub>, CO and POC. The owner/operator shall use only Air District approved test methods. The owner/operator shall notify the Air District's Source Test Section in writing of the Air District approved source test methods and procedures and projected test dates at least 30 days prior to the testing date(s). The report shall be submitted to the Air District's Source Test Section and Engineering Division no later than 60 days from the date of completion of sampling and testing.

(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-2-208 Cumulative Increase)

***End of Conditions***





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-453 & S-455**

**Condition No. 27660**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance): Phillips 66 Rodeo Renewed Project.

S-453 U230 Cooling Tower

S-455 U240 Cooling Tower

S-614 Wet Surface Air Cooler (WSAC) at S-600 Pretreatment Unit (exempt per Regulation 2-1-128.4)

1. The owner/operator of S-453 Cooling Tower shall not exceed a total recirculation water throughput of 13,500 gallons per minute and/or 7,095.6 million gallons during any consecutive 12-month period. (Basis: Regulation 2-1-403 Permit Conditions)
2. The owner/operator of S-455 Cooling Tower shall not exceed a total recirculation water throughput of 33,000 gallons per minute and/or 17,344.8 million gallons during any consecutive 12-month period. (Basis: Regulation 2-1-403 Permit Conditions)
3. The owner/operator of S-453 and S-455 shall not exceed any of the following limits:
  - a. TOC (POC and/or NPOC combined) for S-453 = 13.62 pounds in any calendar day and/or 2.49 tons in any consecutive 12-month period
  - b. TOC (POC and/or NPOC combined) for S-455 = 33.29 pounds in any calendar day and/or 6.08 tons in any consecutive 12-month period
  - c.  $PM_{10} = PM_{2.5}$  for S-453 = 3.18 pounds in any calendar day and/or 0.58 tons in any consecutive 12-month period
  - d.  $PM_{10} = PM_{2.5}$  for S-455 = 8.11 pounds in any calendar day and/or 1.48 tons in any consecutive 12-month period(Basis: Regulation 2-1-403 Permit Conditions)
4. The owner/operator of S-453 and/or S-455 shall ensure the TOC content of cooling water shall not exceed the action trigger level of 84 ppbw. Within 30 days of the Rodeo Renewed Project startup of S-453 and/or 455, the owner/operator of each S-453 and/or S-455 shall take sample of the cooling water return line at least once every week (52 samples per consecutive 12 month period) using EPA Method 8015D or any other Air District approved method. After six consecutive months, the owner/operator of S-453 and S-455 may elect to move to a bi-monthly sampling schedule (two samples every month) provided weekly sampling results do not exceed 84 ppbw for six consecutive months (26 consecutive weekly samples). In the event that any sampling result from S-453 and /or S-455 exceeds 84 ppbw, the owner/operator shall revert to the weekly sampling schedule. (Basis: Regulation 11-10)
5. The owner/operator of S-453 and S-455 Cooling Towers shall not exceed a total dissolved solids (TDS) content in the cooling water of 1,964 ppmw and/or 2047 ppmw (averaged over any consecutive 30-day period), respectively. Compliance with the above TDS concentration limit shall be based on the daily conductivity measurements that shall be taken at the cooling water sump basis at least once per operating shift and in concert with a correlation factor of 0.67 mg/L per microhm. (Basis: Regulation 2-1-403 Permit Conditions)
6. The operator/owner of the S-453 and S-455 Cooling Towers shall maintain documentation, written and provided by the vendor/manufacture, of the guaranteed maximum cooling water drift rate of 0.001 % and the premise, basis, and justification for the drift rate. (Basis: Regulation 2-1-403 Permit Conditions)
7. The owner/operator of each S-453 and S-455 shall install an Air District approved properly operated and properly maintained per manufacturer's specifications non-resettable totalized flow meter that measures the total water flow rate (recirculation and added flow rates). (Basis: Regulation 2-1-403 Permit Conditions)
8. The owner/operator of the S-453, S-455 Cooling Towers and S-614 (WSAC), shall maintain in an Air District approved log, all water usage, recirculation rates, monitoring, source test, vendor/manufacture's specifications, and other records as required to demonstrate compliance with the above conditions on site for at least five years





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-453 & S-455**

**Condition No. 27660**

**Plant No. 21359**

**Application No. 31157**

from the date of data entry, and shall be made available to the Air District's staff for inspection upon request.  
(Basis: Regulation 2-1-403 Permit Conditions, Regulation 2-5)

9. The owner/operator of S-614 Wet Surface Air Cooler (at S-600 Pretreatment Unit) shall conduct a quarterly Air District-approved sampling and testing required of total hydrocarbon concentration of cooling water at recirculation line to ensure no leakage of process water  
(Basis: Regulation 2-1-128.4, Cumulative increase)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-150**

**Condition No. 27661**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance - Phillips 66 Rodeo Renewed Project) - Established throughputs for S-150 Renewable Naphtha Tank (Tank 241).

1. The owner/operator of S-150 shall ensure that the renewable naphtha does not exceed 519,471 barrels in any consecutive rolling 12-month period and/or 31,655 barrels in any calendar day.  
(Basis: Regulation 2-2-208 Cumulative Increase)
2. The owner/operator of S-150 may store alternate organic liquid(s) other than the materials specified in Part 1 and/or usages in excess of those specified in Part 1 provided that the owner/operator can demonstrate that all of the following are satisfied:
  - a. Total POC emissions from S-150 do not exceed 1.813 tons in any consecutive rolling twelve month period and/or 15 pounds in any calendar day;
  - b. Total NPOC emissions from S-150 shall be zero;
  - c. The use of these materials does not increase toxic emissions to equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.(Basis: Regulation 2-2-208 Cumulative Increase; Regulation 2-5 Toxics)
3. To determine compliance with the above parts, the owner/operator of S-150 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:
  - a. Quantities, true vapor pressure and emissions calculations of each type of liquid stored at this source on a daily basis.
  - b. If a material other than those specified in Part 1 is stored, POC and/or NPOC, and toxic component contents of each material used; and Air District approved mass emissions calculations to demonstrate compliance with Part 2, on a daily basis;
  - c. Daily throughput and/or Air District approved emissions calculations shall be totaled for each consecutive twelve-month period.

All records shall be retained on-site for at least five years, from the date of entry, and made available for inspection by Air District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable Air District Regulations. (Basis: Cumulative Increase; Toxics)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-352, S-353, S-354, S-355, S-356, & S-357**

**Condition No. 27754**

**Plant No. 21359**

**Application No. 31157**

CONDITIONS FOR S352, S353, S354, S355, S356, S357: TURBINES AND DUCT BURNERS  
AMENDED BY RODEO RENEWED PROJECT, APPLICATION 31157 (2022)

1. The gas turbines (S352, S353 and S354) and the heat recovery steam generator (HRSG) duct burners (S355, S356 and S357) shall be fired on fuel gas or natural gas.  
[Cumulative Increase]
2. A HRSG duct burner shall be operated only when the associated gas turbine is operated.  
[Cumulative Increase]
3. The exhaust from S352 and S355 shall be abated at all times by SCR unit A13, except that S352 and S355 may operate without SCR abatement on a temporary basis for periods of planned or emergency maintenance. A District-approved NOx CEM shall monitor and record the S352 and S355 NOx emission rate whenever S352 and S355 operate without abatement. All emission limits applicable to S352 and S355 shall remain in effect whether or not they are operated with SCR abatement. [BACT, Cumulative Increase]
4. The exhaust from S353 and S356 shall be abated at all times by SCR unit A14, except that S353 and S356 may operate without SCR abatement on a temporary basis for periods of planned or emergency maintenance. A District-approved NOx CEM shall monitor and record the S353 and S356 NOx emission rate whenever S353 and S356 operate without abatement. All emission limits applicable to S353 and S356 shall remain in effect whether or not they are operated with SCR abatement. [BACT, Cumulative Increase]
5. The exhaust from S354 and S357 shall be abated at all times by SCR unit A15, except that S354 and S357 may operate without SCR abatement on a temporary basis for periods of planned or emergency maintenance. A District-approved NOx CEM shall monitor and record the S354 and S357 NOx emission rate whenever S354 and S357 operate without abatement. All emission limits applicable to S354 and S357 shall remain in effect whether or not they are operated with SCR abatement. [BACT, Cumulative Increase]
6. Total fuel fired in S355, S356, and S357 shall not exceed 2.42 E 12 btu in any consecutive 365 day period. [Cumulative Increase]
7. CO emissions from each turbine/duct burner set shall not exceed 39 ppmv at 15% oxygen, averaged over any consecutive 30 day period. Emissions during startup periods, which shall not exceed four hours, and shutdown periods, which shall not exceed two hours, may be excluded when averaging emissions. [BACT, Cumulative Increase]
8. POC emissions from each turbine/duct burner set shall not exceed 6 ppmv at 15% oxygen, averaged over any consecutive 30 day period. Emissions during startup periods, which shall not exceed four hours, and shutdown periods, which shall not exceed two hours, may be excluded when averaging emissions. [BACT, Cumulative Increase]
- 9a. The combined NOx emissions from S352, S353, S354, S355, S356 and S357 shall not exceed 66 lb/hr (averaged over any 3 hour period), nor 167 tons in any consecutive 365 day period. NOx emissions from each turbine/duct burner set shall not exceed 528 lb/day. (This condition will be invalid when the NOx emissions at these sources must be reduced to provide offsets for Application 13424.) [BACT, Cumulative Increase]
- 9b. This part will apply after NOx emissions at S352, S353, S354, S355, S356 and S357 must be reduced to provide offsets for Application 13424 per Condition 22970, Part B. The combined NOx emissions from S352, S353, S354, S355, S356 and S357 shall not exceed 66 lb/hr (averaged over any 3 hour period), and shall not exceed 79.8 tons in any consecutive 365 day period. NOx emissions from each turbine/duct burner set shall not exceed 528 lb/day. [BACT, Cumulative Increase, Offsets]
- 9c. NOx emissions from S352, S353, S354, S355, S356 and S357 shall be monitored with a District-approved continuous emission monitor. [BACT, Cumulative Increase]



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-352, S-353, S-354, S-355, S-356, & S-357**

**Condition No. 27754**

**Plant No. 21359**

**Application No. 31157**

- 9d. The owner/operator shall use a fuel meter to determine the heat input to each unit. This data shall be used to determine compliance with all throughput limits and the NO<sub>x</sub>, CO, and SO<sub>2</sub> mass emission limits. [Cumulative Increase, 2-6-503]
- 10a. The combined CO emissions from S352, S353, S354, S355, S356 and S357 shall not exceed 200 tons in any consecutive 365 day period. [BACT, Cumulative Increase]
- 10b. CO emissions from S352, S353, S354, S355, S356 and S357 shall be monitored with a District-approved continuous emission monitor. [BACT, Cumulative Increase]
11. The combined POC emissions S352, S353, S354, S355, S356 and S357 shall not exceed 8.3 lb/hr and shall not exceed 30.5 tons in any consecutive 365 day period. [BACT, Cumulative Increase]
12. The fuel gas shall be tested for total reduced sulfur (TRS) concentration at least once per 8 hour shift (3 times per calendar day). At least 90% of these samples shall be taken each calendar month. No readable samples or sample results shall be omitted. TRS shall include hydrogen sulfide, methyl mercaptan, methyl sulfide, dimethyl disulfide. [Cumulative Increase]
13. The average of the 3 daily fuel gas TRS sample results shall be reported to the Air District in a table format each calendar month, with a separate entry for each daily average. Sample reports shall be submitted to the Air District within 30 days of the end of each calendar month. Any omitted sample results shall be explained in this report. [Cumulative Increase]
14. A source test to verify compliance with Parts 8 and 11 shall be performed each calendar year in accordance with Air District source test methods or other methods approved in advance by the Air District. A copy of the test report shall be provided to the District Director of Compliance and Enforcement within 60 days of completion of the test. [Regulation 2-6-409.2]
15. Records shall be maintained to allow verification of compliance with all permit conditions. Records shall be retained for at least five years and shall be made available to the Air District upon request. [BACT, Cumulative Increase]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-125**

**Condition No. 27787**

**Plant No. 21359**

**Application No. 31157**

Application 31157 (2022 – Initial Issuance - Phillips 66 Rodeo Renewed Project) - Established throughputs for S-125 Gasoline, Gasoline Blend, and Renewable Naphtha Tank (Tank 170).

1. The owner/operator of S-125 shall ensure that the renewable naphtha does not exceed 3,000,000 barrels in any consecutive rolling 12-month period and/or 29,918 barrels in any calendar day.  
(Basis: Regulation 2-2-208 Cumulative Increase)
2. The owner/operator of S-125 may store alternate organic liquid(s) other than the materials specified in Part 1 and/or usages in excess of those specified in Part 1 provided that the owner/operator can demonstrate that all of the following are satisfied:
  - a. Total POC emissions from S-125 do not exceed 1.782 tons in any consecutive rolling twelve month period and/or 10 pounds in any calendar day;
  - b. Total NPOC emissions from S-125 shall be zero;
  - c. The use of these materials does not increase toxic emissions to equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.  
(Basis: Regulation 2-2-208 Cumulative Increase; Regulation 2-5 Toxics)
3. To determine compliance with the above parts, the owner/operator of S-125 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:
  - a. Quantities, true vapor pressure and emissions calculations of each type of liquid stored at this source on a daily basis.
  - b. If a material other than those specified in Part 1 is stored, POC and/or NPOC, and toxic component contents of each material used; and Air District approved mass emissions calculations to demonstrate compliance with Part 2, on a daily basis;
  - c. Daily throughput and/or Air District approved emissions calculations shall be totaled for each consecutive twelve-month period.

All records shall be retained on-site for at least five years, from the date of entry, and made available for inspection by Air District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable Air District Regulations. (Basis: Cumulative Increase; Toxics)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-446 & S-447**

**Condition No. 27808**

**Plant No. 21359**

**Application No. 31157**

**CONDITIONS FOR S445, TANK (T-271)**

S-445 will be exempt after Rodeo Renewed Project startup, Application 31157 (2022). New condition 27646, Part 21 requires notification of switch to exempt service. New condition 27646, Part 22 also requires notification of switching to exempt service only.

1. Working emissions from S445 shall be collected and vented to the refinery fuel gas supply. Other abatement devices, which provide at least 98% abatement of POC and/or NPOC combined emissions by weight, may be used with the prior approval of the Air District. [Basis: Cumulative Increase, Regulation 1-107]

**CONDITIONS FOR S446, TANK (T-310)**

Amended by Application 31157 (2022)

1. The owner/operator shall ensure the emissions from S446 be collected and vented to the refinery Vapor Recovery System A-7 or other Air District approved abatement devices, which provide at least 98% abatement of POC and/or NPOC combined emissions by weight. [Basis: Cumulative Increase, Regulation 1-107]

**CONDITIONS FOR S447, TANK (T-311)**

Amended by Application 31157 (2022)

1. The owner/operator shall ensure the emissions from S447 be collected and vented to the refinery Vapor Recovery System A-7 or other Air District approved abatement devices, which provide at least 98% abatement of POC and/or NPOC combined emissions by weight. [Basis: Cumulative Increase, Regulation 1-107]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-448**

**Condition No. 27809**

**Plant No. 21359**

**Application No. 31157**

AMENDED BY APPLICATIONS 22023 (SEPT. 2010) AND 23726 (OCT 2011)

CONDITIONS FOR S-448 (T-1007), S-448 will be exempt after Rodeo Renewed Project startup, Application 31157 (2022).

1. Delete, tank exempt.
2. S448 shall operate with closed, gasketed covers on all tank openings except pressure relief valves and vacuum breaker valves. [BACT]

3. Deleted, Tank exempt.

Alternate Operating Scenario

4. S-448 is under an Alternate Operating Scenario in accordance with BAAQMD Regulation 2-6-409.7 and 40 CFR 70 and either stores material subject to Regulation 8, Rule 5 and 40 CFR Part 60 Subpart Kb or stores material exempt from Regulation 8, Rule 5 and 40 CFR Part 60 Subpart Kb.
  - a. The owner/operator shall keep a record in a contemporaneous log of the stored material.
  - b. The owner/operator shall notify the District in accordance with section 40 CFR 60.113(a)(5) prior to storing materials in S-448 that are subject to Regulation 8, Rule 5 and 40 CFR Part 60 Subpart Kb.
  - c. The owner/operator shall perform inspections required by Regulation 8, Rule 5 and 40 CFR Part 60 Subpart Kb prior to storing materials in S-448 that are subject to those regulations.

[40 CFR 70.6(a)(9), BAAQMD Regulation 2-6-409.7]

***End of Conditions***





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-11 & S-22**

**Condition No. 27811**

**Plant No. 21359**

**Application No. 31157**

This condition was amended by Applications 13424 in October 2007, 14602 in May 2008, 22904 in March 2013, 21848 in September 2014, and 31157 in 2022

Regulation 9-10 Refinery-Wide Compliance

CONDITIONS FOR SOURCES S2, S3, S4, S5, S7, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18, S19, S20, S22, S31, S43, S44, S336, S337, S371, S372.

1. The following sources are subject to the refinery-wide NO<sub>x</sub> emission rate and CO concentration limits in Regulation 9-10: [Regulation 9-10-301 and 305]

S# Description NO<sub>x</sub> CEM

2 U229, B-301 Heater No

3 U230, B-201 Heater Yes

4 U231, B-101 Heater Yes

5 U231, B-102 Heater Yes

7 U231, B-103 Heater Yes

9 U240, B-2 Boiler Yes

10 U240, B-101 Heater Yes

11 U240, B-201 Heater Yes

12 U240, B-202 Heater Yes

13 U240, B-301 Heater Yes

15 U244, B-501 Heater Yes

16 U244, B-502 Heater Yes

17 U244, B-503 Heater Yes

18 U244, B-504 Heater Yes

19 U244, B-505 Heater Yes

20 U244, B-506 Heater No

22 U248, B-606 Heater No

shutdown per AN31157 upon startup

shutdown per AN 31157 upon startup

31 U200, B-501 Heater No

43 U200, B-202 Heater Yes

44 U200, B-201 PCT Reboil Furnace Yes

336 U231 B-104 Heater Yes

337 U231 B-105 Heater Yes

shutdown per AN31157 upon startup

371 U228 B-520 (Adsorber Feed) Furnace Yes

372 U228 B-521 (Hydrogen Plant) Furnace Yes

2. The owner/operator of each source listed in Part 1 shall properly install, properly maintain, and properly operate an O<sub>2</sub> monitor and recorder. [Regulation 9-10-502]

3. The owner/operator shall operate each source listed in Part 1, that does not have a NO<sub>x</sub> CEM within specified ranges of operating conditions (firing rate and oxygen content) as detailed in Part 5. The ranges shall be established by utilizing data from district approved source tests.

a. The NO<sub>x</sub> Box for units with a maximum firing rate of 25 MMBtu/hr or more shall be established using the procedures in Part 4.

b. The NO<sub>x</sub> Box for units with a maximum firing rate less than 25 MMBtu/hr shall be established as follows: High fire shall be the maximum rated capacity. Low fire shall be 20% of the maximum rated capacity.

There shall be no maximum or minimum O<sub>2</sub>.

[Regulation 9-10-502]



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-11 & S-22**

**Condition No. 27811**

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4. The owner/operator shall establish the initial NOx box for each source subject to Part 3. The NOx Box may consist of two operating ranges in order to allow for operating flexibility and to encourage emission minimization during standard operation. The procedure for establishing the NOx box is as follows:

- a. Conduct district approved source tests for NOx and CO, while varying the oxygen concentration and firing rate over the desired operating ranges for the furnace;
- b. Determine the minimum and maximum oxygen concentrations and firing rates for the desired operating ranges (Note that the minimum O<sub>2</sub> at low fire may be different than the minimum O<sub>2</sub> at high fire. The same is true for the maximum O<sub>2</sub>). The owner/operator shall also verify the accuracy of the O<sub>2</sub> monitor on an annual basis
- c. Determine the highest NOx emission factor (lb/Mmbtu) over the preferred operating ranges while maintaining CO concentration below 200 ppm; the owner/operator may choose to use a higher NOx emission factor than tested.
- d. Plot the points representing the desired operating ranges on a graph. The resulting polygon(s) is the NOx Box, which represents the allowable operating range(s) for the furnace under which the NOx emission factor from part 5a is deemed to be valid.
  - 1) The NOx Box can represent/utilize either one or two emission factors.
  - 2) The NOx Box for each emission factor can be represented either as a 4 or 5-sided polygon. The NOx box is the area within the 4 or 5-sided polygon formed by connecting the source test based parameters that lie about the perimeter of successful approved source tests. The source test parameters forming the corners of the NOx box are listed in Part 5.
- e. Upon establishment of each NOx Box, the owner/operator shall prepare a graphical representation of the box. The representation shall be made available on site for APCO review upon request. The box shall also be submitted to the BAAQMD with permit amendments.

5. Except as provided in Part 5b and 5c, the owner/operator shall operate each source within the NOx box ranges listed below at all times of operation. This part shall not apply to any source which has a properly operated and properly installed NOx CEM.

a. NOx Box ranges

2/0.031/N/A, 4.4/N/A, 4.4/N/A, 22/N/A/N/A, 22

. Deleted S-11 now has NOx CEM.

. Deleted S-12 now has NOx CEM.

20/0.036/N/A, 4.6/N/A, 4.6/N/A, 23/N/A/N/A, 23

22/0.036/2.1, 6.2/2.1, 24/4.4, 24/4.7, 21/4.7, 6.2

22/0.050/4.7, 6.2/4.7, 21/10, 20.3/10, 6.2/N/A.

31/0.055/N/A, 4/N/A, 4/N/A, 20/N/A/N/A, 20

The limits listed above are based on a calendar day averaging period for both firing rate and O<sub>2</sub>%.

b. Part 5a does not apply during:

- 1) startup or shutdown periods,
- 2) periods of curtailed operation (i.e., firing rate less than or equal to 30% of unit's rated capacity as defined in 9-10-22), or
- 3) to units temporary out of service. During these conditions the means for determining compliance with the refinery wide limit shall be accomplished using the method described in 9-10-301.4 and 301.5.



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**Source Nos. S-11 & S-22**

**Condition No. 27811**

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- c. Part 5a does not apply during any source test required or permitted by this condition. (Reg. 9-10-502). See Part 7 for the consequences of source test results that exceed the emission factors in Part 5.
- 6.
- a. The owner/operator may deviate from the NO<sub>x</sub> Box (either the firing rate or oxygen limit) provided that the owner/operator conducts a district approved source test which replicates the past operation outside of the established ranges. The source test representing the new conditions shall be conducted no later than the next regularly scheduled source test period, or within eight months, whichever is sooner. The source test results will establish whether the source was operating outside of the emission factor utilized for the source. The source test results shall be submitted to the district source test manager within 60 days of the test. As necessary, a permit amendment shall be submitted.
- 1) Source Test  $\leq$  Emission Factor
- If the results of this source test do not exceed the higher NO<sub>x</sub> emission factor in Part 5, or the CO limit in Part 9, the unit will not be considered to be in violation during this period for operating out of the "box." The facility may submit an accelerated permit program permit application to request an administrative change of the permit condition to adjust the NO<sub>x</sub> Box operating range(s), based on the new test data. The change will be considered to be an administrative change for the purpose of the District permit and a minor revision for the purpose of the Major Facility Review permit.
- 2) Source Test  $>$  Emission Factor
- If the results of this source test exceed the permitted emission concentrations or emission rates then, utilizing measured emission concentration or rate, the owner/operator shall apply the higher emission factor retroactively to the date of the previous source test and provide sufficient NO<sub>x</sub> IERCs for that time period to ensure the facility is in compliance with the refinery wide limit specified in Regulation 9-10-301. The owner/operator will be in violation of Regulation 9-10-301 for each day there are insufficient NO<sub>x</sub> IERCs provided to bring the refinery wide average into compliance with Regulation 9-10-301. The facility may submit a permit application to request an alteration of the permit condition to change the NO<sub>x</sub> emission factor and/or adjust the operating range, based on the new test data.
- b. The owner/operator must report conditions outside of box within 96 hours of occurrence.
7. For each source subject to Part 3, the owner/operator shall conduct source tests at the schedule listed below. The source tests are performed in order to measure NO<sub>x</sub>, CO, and O<sub>2</sub> at the as-found firing rate, or at conditions reasonably specified by the APCO. The source test results shall be submitted to the District Source Test Manager within 60 days of the test. [Regulation 9-10-502]
- a. Source Testing Schedule
- 1) Heater  $<$  25 MMBtu/hr: One source test per consecutive 12-month period. The time interval between source tests shall not exceed 16 months.
- 2) Heaters = 25 MMBtu/hr: Two source tests per consecutive 12-month period. The time interval between source tests shall not exceed 8 months and not be less than 5 months apart. The source test results shall be submitted to the district source test manager within 60 days of the test. [Regulation 9-10-502]
- b. If the results of any source test under this part exceed the permitted concentrations or emission rates, the owner/operator shall follow the requirements of Part 6a(ii). If the owner/operator chooses not to submit an application to revise the emission factor, the owner/operator shall conduct another Part 7 source test, at the same conditions, within 90 days of the initial test.
8. For each source listed in Part 1 with a NO<sub>x</sub> CEM installed, the owner/operator shall conduct semiannual district approved CO source tests at as-found conditions. The time interval between source tests shall not exceed 8 months. District conducted CO emission tests associated with District conducted NO<sub>x</sub> CEM field accuracy tests may be substituted for the CO semiannual source tests.
9. For any source listed in Part 1 for which any two source test results over any consecutive five-year period are greater than or equal to 200 ppmv CO at 3% O<sub>2</sub>, the owner/operator shall properly install, properly maintain, and



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-11 & S-22**

**Condition No. 27811**

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properly operate a CEM to continuously measure CO and O<sub>2</sub>. The owner/operator shall install the CEM within the time period allowed in the District's Manual of Procedures. [Regulation 9-10-502, 1-522]

10. In addition to records required by 9-10-502, the facility must maintain records of all source tests conducted to demonstrate compliance with Parts 1 and 5. These records shall be kept on site for at least five years from the date of entry in a District approved log and be made available to District staff upon request. [Recordkeeping, Regulation 9-10-504]

11. \*The sources listed in Part 1 of this condition make up the group of sources that are operating under an Alternative Compliance Plan (ACP). The owner/operator shall demonstrate compliance with their ACP and with Regulation 9-10-301 by keeping a spreadsheet of the ACP calculations in a District approved format. [basis: Regulation 2-9-303, 9-10-301]

Conditions for use of IERCs for compliance with Regulation 9-10-301:

12. \*The owner/operator shall submit quarterly reports to the APCO, within 30 days following the end of each calendar quarter, or other 3-month interval established in the plan. Each quarterly report shall include:

- a. Summary of the amount of IERC's used during the previous quarter;
- b. Sum of all IERC's used during the current ACP period;
- c. A projection of the IERC's that are needed for the entire ACP period based on the IERC usage rates calculated in Parts 12a and 12b of this condition, including the Environmental Benefit Surcharge, per Regulation 2-9-309, and
- d. Certification that the facility possesses IERC's equal to the amount projected in Part 12c of this condition or a description of how the facility will adjust its operation so that the amount of IERC's does not exceed the amount of IERC's possessed by the facility.

[basis: Regulation 2-9-502.3]

13. \*The owner/operator shall submit an annual reconciliation report to the APCO within 30 days of following the end of the ACP period, and surrender the banking certificate(s) for all IERC's used during the ACP period, including the environmental benefit surcharge, per Regulation 2-9-309. [basis: Regulation 2-9-502.4]

14. \*The ACP must be reviewed and approved by the APCO on an annual basis. The owner/operator shall submit all necessary documents mentioned in Regulation 2-9-303 with ACP renewal request. [basis: Regulation 2-9-303]

15. \*The owner/operator shall retain records for five years from the date the record was made, and shall submit such information as required by the APCO to determine compliance with the ACP. [basis: Regulation 2-9-502.2]

### ***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-453 & S-455**

**Condition No. 27812**

**Plant No. 21359**

**Application No. 31157**

For Sources S452, S453, S455, S457, S458, S500, Cooling Towers (Applications 10349, 14112, 17465, 27798), Amended by Application 31157 - Condition 27646, part 1 is for S452, S457, and S458. New Condition 27660 was created for S-453 and S-455.

1. Deleted.
2. Deleted.
3. Deleted.
4. The owner/operator shall sample the cooling tower water at each cooling tower at least once per month and subject the sample to a District approved laboratory analysis to determine its total dissolved solids content. [Regulations 2-6-503, Regulation 3]
5. Deleted.
6. Deleted.
7. The owner/operator shall use the total dissolved solids monitoring to estimate annual emissions of particulate from the cooling towers. The estimated annual emissions shall be reported to the Engineering Divisions by June 30<sup>th</sup> of each year as part of the annual update. The owner/operator shall use this estimate to confirm that S452 or S500 has each not emitted more than 5 tons particulate per year. [Regulations 2-1-319.1, 3]
8. The owner/operator shall maintain the following records for five years from the date of record:
  - a. Deleted.
  - b. Deleted.
  - c. Deleted
  - d. Records of monthly determination of total dissolved solids
  - e. Deleted.
  - f. Deleted.[Regulation 2-6-501]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-334**

**Condition No. 27813**

**Plant No. 21359**

**Application No. 31157**

For Sources S123 (Tank 168), S124 (Tank 169), S186 (Tank 298), and S334 (Tank 107)  
Amended by Rodeo Renewed Project, Application 31157 (2022) upon startup

1. The owner/operator shall ensure that S123 contains only water and organic liquid with a true vapor pressure less than or equal to 3.0 psia. [Cumulative Increase]
2. The owner/operator shall ensure that S124 contains only water and organic liquid with a true vapor pressure less than or equal to 11.0 psia. [Cumulative Increase]
3. The owner/operator shall ensure that the emissions of S186 do not exceed 2,231 lb VOC in any consecutive 12-month period. S186 shall only contain organic liquids. [Cumulative Increase]
4. Deleted. S-334 will be exempt per Rodeo Renewed Project, Application 31157
5. The owner/operator shall ensure that the throughput of organic liquids at S123 does not exceed 3,000,000 barrels/yr. [Cumulative Increase]
6. The owner/operator shall ensure that the throughput of organic liquids at S124 does not exceed 3,000,000 barrels/yr. [Cumulative Increase]
7. Deleted. S-334 will be exempt per Rodeo Renewed Project, Application 31157
- 8a. The owner/operator shall equip S123, S124, and S186 with a BAAQMD approved roof with mechanical shoe primary seal and zero gap secondary seal meeting the design criteria of BAAQMD Regulation 8, Rule 5. The owner/operator shall ensure that there are no ungasketed roof penetrations, no slotted pipe guide poles unless equipped with float and wiper seals, and no adjustable roof legs unless fitted with vapor seal boots or equivalent. [BACT, cumulative increase]
- 8b. The owner/operator shall operate S334 with closed, gasketed covers on all tank openings except pressure relief valves and vacuum breaker valves. The owner/operator shall equip S334 with a BAAQMD approved roof with liquid mounted primary seal that meets the design criteria of BAAQMD Regulation 8-5-321.3 and secondary seal that meets the design criteria of BAAQMD Regulation 8-5-322.5. The owner/operator shall ensure that there are no ungasketed roof penetrations, no slotted pipe guide poles unless equipped with float and wiper seals, and no adjustable roof legs unless fitted with vapor seal boots or equivalent. [BACT, cumulative increase]
9. The owner/operator shall calculate the emissions of S186 on a calendar month basis using the AP-42 equations. The owner/operator shall use actual throughputs, actual vapor pressures, and actual temperature data for each month. The owner/operator shall calculate the emissions for the last 12-month period on a monthly basis. The calculations shall be complete within a calendar month after the end of each monthly period. [Cumulative increase]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-135 & S-137**

**Condition No. 27814**

**Plant No. 21359**

**Application No. 31157**

For Sources S135 (Tank 200), S137 (Tank 202), Fixed Roof Tanks. S-135 and S-137 will be exempt after the Rodeo Renewed Project start up and will be phased in, Application 31157 (2022)

1. The owner/operator shall ensure that S135 and S137 are controlled at all times by A7, Vapor Recovery System, with at least 98% abatement of POC and/or NPOC emissions by weight. [Basis: Cumulative Increase, Regulation 1-107]

***End of Conditions***





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-45**

**Condition No. 27815**

**Plant No. 21359**

**Application No. 31157**

This condition was amended by Application 13424 in October, 2007, Application 25621 in April, 2014, Application 27798 in 2018, Application 31157 in 2022.

Source 45, U246 B-801 A/B Heater

1. The owner/operator of the S45 heater shall fire only fuel gas and/or natural gas at this unit. [BACT, Cumulative Increase]
2. Based on fuel gas HHV, the owner/operator of S45 shall not exceed the following firing rates:
  - a. 85 MMBtu/hr
  - b. 744,600 MMBtu in any consecutive 12-month period.[Cumulative Increase]
3. The owner/operator of S45 shall abate emissions from S45 at the A47 SCR system whenever S45 is operated, except that S45 may operate without SCR abatement on a temporary basis for periods of standby and planned or emergency maintenance. A District-approved NOx CEM shall monitor and record the S45 NOx emission rate whenever S45 operates without abatement. All emission limits applicable to S45 shall remain in effect even if it is operated without SCR abatement. [BACT, Cumulative Increase]
4. The owner/operator of S45 shall not exceed the following emission concentrations or rates from S45/A47 except during startups, shutdowns, and standby mode (SCR temperature below 475 deg. F along with no fresh process feed). Startups and shutdowns shall not exceed 48 consecutive hours. The 48 consecutive-hour startup period is in addition to heater dryout/warmup periods, which shall not exceed 24 consecutive hours.
  - a. NOx: 5 ppmv @ 3% oxygen (3 hr average) [BACT, Cumulative Increase]
  - b. CO: 28 ppmv @ 3% oxygen (3 hr average) when operating under 30 MMBtu/hr [BACT, Cumulative Increase, 40 CFR 63.52(a)]
  - c. POC: 5.5 lb/MM ft<sup>3</sup> [Cumulative Increase]
  - d. PM10: 7.6 lb/MM ft<sup>3</sup> [BACT, Cumulative Increase]
  - e. CO: 10 ppmv @ 3% oxygen (3 hr average) when operating over 30 MMBtu/hr [BACT, Cumulative Increase, 40 CFR 63.52(a)]If the heater operates at rates below and above 30 MMBtu/hr in any 3-hour period, the CO limit shall be a weighted average.
5. \*The owner/operator of S45 shall not exceed the following emission rate from S45/A47 except during startups and shutdowns and standby mode (SCR temperature below 475 deg. F along with no fresh process feed). Startups and shutdowns shall not exceed 48 consecutive hours. The 48 consecutive-hour startup period is in addition to heater dryout/warmup periods, which shall not exceed 24 consecutive hours.  
Ammonia: 15 ppmv @ 3% oxygen (8 hr average)  
[Regulation 2, Rule 5]
6. The owner/operator of S45 shall not exceed the following annual emission rates from S45/A47 including startups, shutdowns, standby mode, and malfunctions.
  - a. NOx: 2.3 tons/yr [BACT, Cumulative Increase]
  - b. CO: 2.8 tons/yr [BACT, Cumulative Increase]
  - c. POC: 1.5 tons/yr [Cumulative Increase]
  - d. PM10: 1.9 tons/yr [BACT, Cumulative Increase]
  - e. SO<sub>2</sub>: 4.7 tons/yr [BACT, Cumulative Increase]

The owner/operator shall calculate emissions from S45 using NOx CEM data and District approved emission factors.



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-45**

**Condition No. 27815**

**Plant No. 21359**

**Application No. 31157**

Year is defined as every consecutive 12-month period.

Month is defined as calendar month.

The owner/operator shall submit the basis for the CO emission factor(s) for each operating mode (startup, shutdown, standby dryout/warmup periods) to the Director of the District's Engineering Division no later than 60 days after the measurements were taken as required by Part 9a of this condition.

7. The owner/operator shall equip S45 with a District-approved continuous fuel flow monitor and recorder in order to determine fuel consumption. A parametric monitor as defined in Regulation 1-238 is not acceptable. The owner/operator shall keep continuous fuel flow records for at least five years and shall make these records available to the District upon request. [Cumulative Increase]
8. The owner/operator shall install, calibrate, maintain, and operate District-approved continuous emission monitors and recorders for NO<sub>x</sub> and O<sub>2</sub>. The owner/operator shall keep NO<sub>x</sub> and O<sub>2</sub> data for at least five years and shall make these records available to the District upon request. [BACT, Cumulative Increase]
9.
  - a. The owner/operator shall conduct District-approved source tests two times per year to determine compliance with the CO limit. The tests shall be no less than 4 months apart and no more than 8 months apart. The source tests shall be performed on the heater in an as-found condition. CO source tests performed by the District may be substituted for semi-annual CO source tests. If the heater exceeds the limits in parts 4b or 4e more than once in any 3 year period, the owner/operator shall install, calibrate, maintain, and operate a District-approved continuous emission monitor and recorder for CO within the time period specified in the District Manual of Procedures after the second exceedance of the limits in parts 4b or 4e. The owner/operator shall keep CO data for at least five years and shall make these records available to the District upon request.  
For tests conducted by the owner/operator, the owner/operator shall conduct the source tests in accordance with Part 17. The owner/operator shall submit the source test results to the Director of Compliance and Enforcement, the Source Test Manager, and the Manager of Permit Evaluation at the District no later than 60 days after the source test. [BACT, Cumulative Increase]
  - b. The owner/operator shall measure CO concentrations using a District approved handheld monitor during the first standby mode, startup, and shutdown events after this condition is incorporated into the Title V permit. Thereafter, the owner/operator shall measure CO concentrations using a District approved handheld monitor once every three years to determine CO emission factors during startup, shutdown, and standby mode. The measured CO concentrations and fuel flow data will be used to develop an emission factor or emission factors for CO emissions during startup, shutdown, and standby mode. The owner/operator may record CO concentrations over a period of time and average the concentrations to establish a more representative emission factor for each operational mode. Hand-held portable monitors shall be operated, maintained and calibrated in accordance with manufacturer guidelines.
10. The owner/operator shall use only fuel gas and/or natural gas at S45 that does not exceed 100 ppmv total sulfur, averaged over a calendar month. [BACT, Cumulative Increase]
11. The owner/operator shall test fuel gas prior to combustion at S45 to determine total sulfur concentration by GC analysis or with a total sulfur analyzer (Houston Atlas or equivalent) at least once per 8-hour shift (3 times per calendar day). At least 90% of these samples shall be taken each calendar month. No readable samples or sample results shall be omitted. [BACT, Cumulative Increase]



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**Source No. S-45**

**Condition No. 27815**

**Plant No. 21359**

**Application No. 31157**

12. To demonstrate compliance with Part 10, the owner/operator shall measure and record the daily average sulfur content. The owner/operator shall keep records of sulfur content in fuel gas for at least five years and shall make these records available to the District upon request. [BACT, Cumulative Increase]
13. Deleted Application 13427.
14. The owner/operator shall record the duration of all startups, shutdowns, standby mode, and heater dryout/warmup periods to determine compliance with parts 4, 5, and 6. The owner/operator shall keep the records for at least five years and shall make these records available to the District upon request. [2-6-503]
15. Prior to the commencement of construction, the owner/operator shall submit plans to the District's Source Test Manager to obtain approval of the design and location of the source test ports. The sample ports shall be installed in accordance with Manual of Procedures, Volume 4, Section 1.2.4. (basis: Regulation 1-501)
16. No later than 90 days from the startup of any source covered under Rodeo Renewed Project under Application 31157, the owner/operator of S-42 shall conduct District-approved source tests to determine initial compliance with the limits in Part 4 for NO<sub>x</sub>, CO, POC, PM<sub>10</sub> and ammonia, and the emission rate of sulfuric acid mist. For PM<sub>10</sub>, USEPA Methods 201 and 202. The owner/operator shall conduct the source tests in accordance with Part 17. The owner/operator shall submit the source test results to the District staff no later than 60 days after the source test. [BACT, Cumulative Increase, Regulation 2, Rule 5]
17. The owner/operator shall comply with all applicable requirements for source tests specified in Volume IV of the District's Manual of Procedures and all applicable testing requirements for continuous emissions monitors as specified in Volume V of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test Manager, in writing, of the source test protocols and projected test dates at least 7 days prior to testing. [BACT, Cumulative Increase, Regulation 2, Rule 5]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-122, S-139, & S-140**

**Condition No. 27816**

**Plant No. 21359**

**Application No. 31157**

For Sources S98 (Tank 101), S122 (Tank 167), S128 (Tank 174), S139 (Tank 204); S140 (Tank 205)

This condition was amended by Application 18743 in February 2009, Application 27798 in January 2018 and 31157 (2022).

1. The owner/operator shall ensure that the following tanks contain only organic liquids with true vapor pressures less than or equal the vapor pressures below.
  - a. S98 11.00 psia October through March
  - b. S98 8.50 psia April through September
  - c. Deleted.
  - d. S122 11 psia
  - e. S128 4.4 psia [Cumulative Increase]
2. The owner/operator shall ensure that the combined throughput of gasoline, slop oil, naphtha, renewable gasoline, renewable slop oil, and/or renewable naphtha at the following tanks do not exceed the following throughput limits.
  - a. S98 3,723,000 barrels October through March
  - b. S98 3,723,000 barrels April through September
  - c. Deleted.
  - d. S122 2,000,000 barrels per consecutive 12-month period
  - e. S128 5,100,000 per any consecutive 12-month period
  - f. S139 962,972 bbls in any consecutive 12-month period
  - g. S140 630,575 bbls in any consecutive 12-month period  
[Cumulative Increase]
3. The owner/operator shall ensure that S139 and S140 are abated by A7, Vapor Recovery System. The Vapor Recovery System A7 shall have at least an overall 98% system control efficiency. [8-5-301, 40 CFR 61, Subpart FF, Regulation 1-107]
4. The owner/operator shall equip S98, S122, and S128 with a BAAQMD approved roof with mechanical shoe primary seal and zero gap secondary seal meeting the design criteria of BAAQMD Regulation 8, Rule The owner/operator shall ensure that there are no ungasketed roof penetrations, no slotted pipe guide poles unless equipped with float and wiper seals, and no adjustable roof legs unless fitted with vapor seal boots or equivalent. [BACT, cumulative increase]
5. The owner/operator of
  - a. S122 shall not exceed 5,479 barrels of organic liquids in any calendar day;
  - b. S139 shall not exceed 35,145 barrels of organic liquids in any calendar day
  - c. S140 shall not exceed 56,107 barrels of organic liquids in any calendar day.  
(Basis: Cumulative Increase)
6. The owner/operator of S-122, S-139 and/or S-140 may use an alternate material(s) other than the materials specified in Part 2 and/or usages in excess of those specified in Part 2, provided that the owner/operator can demonstrate that all of the following are satisfied:
  - a. Total POC emissions from S-122 shall not exceed 4.095 tons in any consecutive twelve-month period; and/or total NPOC emissions from S-122 shall be zero in any consecutive twelve-month period.
  - b. Total POC and methane emissions combined from S-139 shall not exceed 3.206 tons in any consecutive twelve-month period;
  - c. Total POC and methane emissions combined from S-140 shall not exceed 2.623 tons in any consecutive twelve-month period;



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**Source Nos. S-122, S-139, & S-140**

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- d. Total POC emissions from S-122 shall not exceed 22 pounds in any calendar day; and/or total NPOC emissions from S-122 shall be zero pounds in any calendar day;
- e. Total POC and methane emissions combined from S-139 shall not exceed 49 pounds in any calendar day;
- f. Total POC and methane emissions combined emissions from S-140 shall not exceed 94 pounds in calendar day; and
- g. The use of these materials does not increase toxic emissions equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.

(Basis: Cumulative Increase; Toxics)

- 7. To determine compliance with the above parts, the owner/operator of S-122, S-139 and/or S-140 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:
  - a. Quantities, vapor pressures and emission calculations of each type of material stored at S-122, S-139 and S-140 on a daily basis.
  - b. If a material other than those specified in Part 2 is used, POC, NPOC, methane and/or toxic component contents of each material used; and mass emission calculations to demonstrate compliance with Part 6, on a daily basis;
  - c. daily throughput and/or emission calculations shall be totaled for each consecutive twelvemonth period.All records shall be retained on-site for at least five years, from the date of entry, and made available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations. (Basis: Cumulative Increase; Toxics)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-465, -599, & S-1010**

**Condition No. 27817**

**Plant No. 21359**

**Application No. 31157**

Sources S465, Sulfur Pit

abated by S1010, Sulfur Recovery Unit This condition was amended by Application 13424 in October, 2007, and by Application 10994 on October 31, 2008. Amended by Rodeo Renewed Project, Application 31157 (2022)

1. Delete S-301, S-302 and S-303 are shut down with Rodeo Renewed Project.
2. The owner/operator shall ensure that the throughput of molten sulfur at S465 does not exceed 73,000 long tons per consecutive 12-month period. [Cumulative Increase]
3. The owner/operator shall ensure that S465, Sulfur Pit, is controlled at all times by S1010, Sulfur Recovery Unit. [Cumulative increase, Regulation 2-1-403 Permit Conditions]
4. Deleted. S301 shut down
5. Deleted. S302 shut down
6. Deleted. S-303 shut down
7. Delete S-301, S-302 and S-303 are shut down with Rodeo Renewed Project.
8. Delete S-301, S-302 and S-303 are shut down with Rodeo Renewed Project.
9. The owner/operator shall maintain monthly records of throughput at S465. The owner/operator shall keep the record of the molten sulfur throughput on file at all times. These records shall be maintained on site for a minimum of 5 years and shall be made available to District staff upon request. [Cumulative Increase]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. S-503, S-504, S-505, S-599, & S-1010**

**Condition No. 27818**

**Plant No. 21359**

**Application No. 31157**

Source S1010, U235 Sulfur Recovery Unit, S503, Sulfur Storage Tank, S504, Sulfur Degassing Unit, S505, Sulfur Truck Loading Rack

Amended by Rodeo Renewed Project, Application 31157 (2022)

For the purposes of this condition, total reduced sulfur shall mean dimethyl disulfide, dimethyl sulfide, hydrogen sulfide, and methyl mercaptan; and reduced sulfur compounds shall mean hydrogen sulfide, carbonyl sulfide, and carbon disulfide.

1. The owner/operator shall ensure that the throughput of molten sulfur at S1010 does not exceed 200 long tons/day. [Cumulative Increase]
2. The owner/operator shall ensure that the throughput of molten sulfur at S503 does not exceed 471 long tons/day. [Cumulative Increase]
3. The owner/operator shall ensure that S1010 is abated at all times of operation by A48, SRU Tail Gas Treatment Unit, and A424, Incinerator. [Cumulative Increase]
4. The owner/operator shall ensure that S503, Sulfur Storage Tank, S504, Sulfur Degassing Unit, and S505, Sulfur Truck Loading Rack, are controlled at all times of operation by the Claus reaction furnace at S1010, Sulfur Recovery Unit. [Cumulative Increase, 2-1-305]
5. All pressure relief devices on S1010 shall be vented to a fuel gas recovery system, furnace, or flare with a recovery/destruction efficiency of 98%. [8-28-302, BACT]
6. The owner/operator shall ensure that the supplemental fuel used at A424, Tail Gas Incinerator, is PUC quality natural gas. [BACT]
7. The owner/operator shall not exceed the following emission concentrations from S1010/A48/A424:
  - a. SO<sub>2</sub> 50 ppmv, dry, @ 0% O<sub>2</sub>, 24-hour basis. [BACT]
  - b. CO 75 ppmvd, dry, @ 7% O<sub>2</sub>, 1-hour basis. [BACT]
  - c. NO<sub>x</sub> 42.2 ppmv, dry, @ 7% O<sub>2</sub>, 1-hour basis. [BACT]
- \*8. The owner/operator shall not exceed the following emission concentrations from S1010/A48/A424:
  - a. NH<sub>3</sub> 12.5 ppmv @ 7% O<sub>2</sub>, 24-hour basis [Regulation 2, Rule 5]
  - b. H<sub>2</sub>S: 2.5 ppmv @ 0% O<sub>2</sub>, 24-hour basis [Regulation 2, Rule 5]
9. The owner/operator shall not exceed the following hourly limits from S1010/A48/A424:
  - a. NO<sub>x</sub>: 8.0 lb/hr [2-1-305]
  - \*b. H<sub>2</sub>S: 0.23 lb/hr [Regulation 2, Rule 5]
  - \*c. NH<sub>3</sub>: 0.88 lb/hr [Regulation 2, Rule 5]
10. The owner/operator shall ensure that daily emissions, including startups, shutdowns, upsets, and malfunctions, from S1010/A48/A424 do not exceed the following limits:
  - a. Sulfuric acid mist: 31 lb/day [PSD]
  - b. PM<sub>10</sub>: 9.5 lb/day [2-1-301]
11. The owner/operator shall ensure that that annual emissions, including startups, shutdowns, upsets, and malfunctions, from S1010/A48/A424, do not exceed the following limits per any consecutive 12-month period:
  - a. SO<sub>2</sub>: 29.7 tons [BACT, Cumulative Increase]
  - b. NH<sub>3</sub>: 3.85 tons [Regulation 2, Rule 5]
  - c. CO: 37.9 tons [BACT, Cumulative Increase]
  - d. NO<sub>x</sub>: 11.2 tons [BACT, Cumulative Increase]
  - e. POC: 0.43 tons [Cumulative Increase]
  - f. PM<sub>10</sub>: 1.19 tons [Cumulative Increase]
  - g. Sulfuric acid mist: 5.65 tons [2-1-301]
  - \*h. H<sub>2</sub>S: 0.975 tons [Regulation 2, Rule 5]
  - i. Total Reduced Sulfur: 10 tons [PSD]
  - j. Reduced Sulfur Compounds: 10 tons [PSD]
  - k. H<sub>2</sub>S: 10 tons [PSD]
12. Prior to the commencement of construction, the owner/operator shall submit plans to the District's Source Test Division to obtain approval of the design and location of the source test ports. The





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**Source Nos. S-503, S-504, S-505, S-599, & S-1010**

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- sample ports shall be installed in accordance with Manual of Procedures, Volume 4, Section 1.2.4. Ports for filterable particulate and PM10 testing shall be installed. [basis: Regulation 1-501]
13. No later than 90 days from the startup of S1010, the owner/operator shall conduct District-approved source tests to determine (1) initial compliance with the limits in Parts 7, 8, 9, and 13 for NO<sub>x</sub>, CO, POC, PM10, SO<sub>2</sub>, sulfuric acid mist, H<sub>2</sub>S, ammonia, (2) the BAAQMD Regulation 6 requirements below, and (3) the emission rates in lbs/dry standard cubic foot of NO<sub>x</sub>, POC, PM10, sulfuric acid mist, NH<sub>3</sub>, H<sub>2</sub>S, and reduced sulfur compounds. The owner/operator shall conduct the source tests in accordance with Part 19. The owner/operator shall submit the source test results to the District staff no later than 60 days after the source test. During the source test, the owner/operator shall determine the temperature required to achieve an outlet concentration of 2.5 ppmv H<sub>2</sub>S @ 0% O<sub>2</sub>, mass emissions of 0.23 lb/hr of H<sub>2</sub>S, mass emissions of 2.2 lb/hr of reduced sulfur compounds, and 2.2 lb/hr of total reduced sulfur, while meeting all other limits. The temperature shall become an enforceable limit.
- a. BAAQMD Regulation 6-1-310.1 and SIP Regulation 6-310: 0.15 gr PM/dscf
  - b. BAAQMD Regulation 6-1-311.1 and SIP Regulation 6-311: PM emissions based on Process Rate Weight
  - c. BAAQMD Regulation 6-1-330 and SIP Regulation 6-330: SO<sub>3</sub> and H<sub>2</sub>SO<sub>4</sub> limit
- Compliance with the 24-hour H<sub>2</sub>S and NH<sub>3</sub> concentration limits shall be shown using three 30-minute runs as provided by the test method, unless the owner/operator chooses to run the test for 24 hours. If the rate of reduced sulfur compounds, including H<sub>2</sub>S, exceeds 2.2 lb/hr, or if the rate of total reduced sulfur, including H<sub>2</sub>S, exceeds 2.2 lb/hr, the District reserves the right to require additional PSD analysis or to impose a higher temperature limit for A424, Incinerator, to control total reduced sulfur and reduced sulfur compounds.
- [BACT, Cumulative Increase; Regulation 2, Rule 5; BAAQMD Regulation 6; PSD, 40 CFR 64.6(d)]
14. After the initial source test required in part 13 of this condition, the owner/operator shall ensure that the minimum temperature of A424 shall not be lower than 1409 F. [Offsets, 40 CFR 64]
15. To determine compliance with the temperature limit in part 14, A424, Thermal Oxidizer, shall be equipped with a temperature measuring device capable of continuously measuring and recording the temperature in A424. The temperature monitor shall be installed prior to startup. The owner/operator shall install, and maintain in accordance with manufacturer's recommendations, a temperature measuring device that meets the following criteria: the minimum and maximum measurable temperatures with the device are 0 degrees F and 2,300 degrees F, respectively, and the minimum accuracy of the device over this temperature range shall be 1.0 percent of full-scale. [Regulation 1-521, 40 CFR 64.6(d)]
16. The temperature limit in part 14 shall not apply during an "Allowable Temperature Excursion", provided that the temperature controller setpoint complies with the temperature limit. For the purposes of parts 16 and 17 of this condition, a temperature excursion refers only to temperatures below the limit. An Allowable Temperature Excursion is one of the following:
- a. A temperature excursion not exceeding 20 degrees F; or
  - b. A temperature excursion for a period or periods which when combined are less than or equal to 15 minutes in any hour; or
  - c. A temperature excursion for a period or periods which when combined are more than 15 minutes in any hour, provided that all three of the following criteria are met.
    - i. the excursion does not exceed 50 degrees F;
    - ii. the duration of the excursion does not exceed 24 hours; and
    - iii. the total number of such excursions does not exceed 12 per calendar year (or any consecutive 12 month period).
- Two or more excursions greater than 15 minutes in duration occurring during the same 24-hour period shall be counted as one excursion toward the 12 excursion limit. [Regulation 2-1-403]



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**Source Nos. S-503, S-504, S-505, S-599, & S-1010**

**Condition No. 27818**

**Plant No. 21359**

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17. For each Allowable Temperature Excursion that exceeds 20 degrees F and 15 minutes in duration, the Permit Holder shall keep sufficient records to demonstrate that they meet the qualifying criteria described above. Records shall be retained for a minimum of five years from the date of entry, and shall be made available to the District upon request. Records shall include at least the following information:
  - a. Temperature controller setpoint;
  - b. Starting date and time, and duration of each Allowable Temperature Excursion;
  - c. Measured temperature during each Allowable Temperature Excursion;
  - d. Number of Allowable Temperature Excursions per month, and total number for the current calendar year; and
  - e. All strip charts or other temperature records. [Regulation 2-1-403]
18. For the purposes of parts 16 and 17 of this condition, a temperature excursion refers only to temperatures below the limit. (Basis: Regulation 2-1-403)
19. The owner/operator shall submit protocols for all source test procedures to the District's Source Test Section at least three weeks prior to conducting any tests. The owner/operator shall comply with all applicable testing requirements for continuous emissions monitors as specified in Volume V of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test Section, in writing, of the projected test dates at least 7 days prior to testing. [BACT, Cumulative Increase; Regulation 2, Rule 5]
20. The owner/operator shall perform an annual District-approved source test to verify compliance with the following requirements. A copy of the source test results shall be provided to the District Director of Compliance and Enforcement within 60 days of the test.
  - a. BAAQMD Regulation 6-1-310.1 and SIP Regulation 6-310: 0.15 gr PM/dscf
  - b. BAAQMD Regulation 6-1-311.1 and SIP Regulation 6-311: PM emissions based on Process Rate Weight
  - c. BAAQMD Regulation 6-1-330 and SIP Regulation 6-330: SO<sub>3</sub> and H<sub>2</sub>SO<sub>4</sub> limit
  - d. Emission rates in parts 7c, 8a, 8b, 9a, 9b, and 9c of this condition.
  - e. Emission rates of sulfuric acid mist, total reduced sulfur, and reduced sulfur compoundsCompliance with the 24-hour H<sub>2</sub>S concentration limit shall be shown using three 30-minute runs as provided by the test method, unless the owner/operator chooses to run the test for 24 hours. [BACT; BAAQMD Regulation 6, Rule 1 ; SIP Regulation 6; PSD; Regulation 2, Rule 5; Cumulative increase]
21. The owner/operator shall install, calibrate, maintain, and operate a District-approved continuous emission monitor (CEM) and recorder for exhaust gas flowrate, SO<sub>2</sub> and O<sub>2</sub>. The CEM shall be installed prior to startup. The owner/operator shall keep exhaust gas flow, SO<sub>2</sub> and O<sub>2</sub> data for at least five years and shall make these records available to the District upon request. The owner/operator shall measure SO<sub>2</sub> concentration and mass emissions on a clock-hour basis. The monitors shall comply with the requirements of 40 CFR 60.105, 40 CFR 63.1572, and the District's Manual of Procedures, Volume 5. [BACT, Cumulative Increase, Regulation 2-1-403 Permit Conditions; 40 CFR 64.6(c)(1), (c)(3), and (d); 40 CFR 63.1568(a)(1)(i)]
22. The owner/operator shall install, calibrate, maintain, and operate a District-approved continuous emission monitor (CEM) and recorder for exhaust gas flow and CO. The CEM shall be installed prior to startup. The CEM shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. The owner/operator shall keep flow and CO data for at least five years and shall make these records available to the District upon request. The owner/operator shall measure CO concentration and mass emissions on a clock-hour basis. The monitors shall comply the requirements of the District's Manual of Procedures, Volume 5. [BACT, Cumulative Increase; 40 CFR 64.6(c)(1) and (d)]
23. Deleted Application 13427



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**Source Nos. S-503, S-504, S-505, S-599, & S-1010**

**Condition No. 27818**

**Plant No. 21359**

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24. The owner/operator shall keep throughput records for sources S1010 and S503 on a daily basis. The records shall be kept on site for a period of at least 5 years and shall be made available for inspection by District staff upon request. [Cumulative Increase]
25. The owner/operator shall use the source tests required in parts 13 and 20 to determine compliance with the daily limit in part 10 and the annual limits in parts 11b, 11d, 11e, 11f, 11h, and 11i. At the end of every month, the owner/operator shall summarize the exhaust gas flow in dry standard cubic feet for the month and shall calculate the estimated emissions of each pollutant for the previous consecutive 12-month period and for H<sub>2</sub>S for each day of the month using the emission rate determined in the last source test. The summaries and calculations shall be completed within 60 days of the end of each month. Alternately, the owner/operator may establish a daily and monthly exhaust gas flow level after each source test that will ensure compliance with the daily and annual limits. In this case, the owner/operator will log the daily and monthly exhaust gas flows from S1010/A48/A424. [Cumulative increase; Regulation 2, Rule 5; Cumulative Increase, PSD]
26. The Owner/Operator shall perform a visible emissions check on Source S1010 on a monthly basis. The visible emissions check shall take place while the equipment is operating and during daylight hours. If any visible emissions are detected, the owner/operator shall have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures outlined in the CARB manual, "Visible Emissions Evaluation" for six (6) minutes within three (3) days and record the results of the reading. If the reading is in compliance with the Ringelmann 1.0 limit in BAAQMD Regulation 6-1-301, the reading shall be recorded and the owner/operator shall continue to perform a visible emissions check on a monthly basis. If the reading is not in compliance with the Ringelmann 1.0 limit in BAAQMD Regulation 6-1-301, the owner/operator shall take corrective action and report the violation in accordance with Standard Condition 1.F of the Title V permit. The certified smoke-reader shall continue to conduct the Method 9 or CARB Visible Emission Evaluation on a daily basis until the daily reading shows compliance with the applicable limit or until the equipment is shut down. Records of visible emissions checks and opacity readings made by a CARB-certified smoke reader shall be kept for a period of at least 5 years from date of entry and shall be made available to District staff upon request. [Basis: BAAQMD Regulations 6-1-301, 2-1-403; SIP Regulation 6]

Additional CAM conditions:

27. The owner/operator shall develop specifications for the location and installation of the temperature monitor to ensure that the temperature data is representative of the concentration of H<sub>2</sub>S, reduced sulfur compounds, and total reduced sulfur. [40 CFR 64.3(b)(1)]
28. The owner/operator shall develop verification procedures to confirm the operational status of the temperature monitoring prior to the date that monitoring must be conducted. [40 CFR 64.3(b)(2)]
29. The owner/operator shall develop quality assurance and control practices for the temperature monitoring. [40 CFR 64.3(b)(3)]
30. The owner/operator shall record the temperature at least 4 times per hour in a computerized data acquisition system, except during times of temperature monitor malfunction that comply with BAAQMD Regulation 1-523. [40 CFR 64.3(b)(4)]
31. The owner/operator shall determine that an exceedance of the temperature limit has occurred when the temperature drops below the limit set in accordance with part 13 of this condition; except that a limited number of excursions may occur without penalty in accordance with parts 16 through 18 of this condition. [40 CFR 64.6(c)(2)]

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. A-626**

**Condition No. 27819**

**Plant No. 21359**

**Application No. 31157**

Amended by Rodeo Renewed Project, Application 31157 (2022) converted to fix roof tank and abated by carbon adsorption system.

1. The total throughput of renewable feedstock and other organic liquids at S97 shall not exceed 15.571 million barrels in any consecutive rolling 12 month period and/or 42,660 barrels in any calendar day. The tank shall only store renewable feedstocks upon startup of any source covered in Application 31157.  
[BACT, Cumulative Increase]
2. Delete, tank is abated by carbon adsorption system in Rodeo Renewed Project, Application 31157
3. Monthly records of the throughput of each material processed at this tank and corresponding vapor pressure of each material and emission calculations shall be kept in a District approved log for at least 5 years and shall be made available to the Air District upon request. [Cumulative Increase]
4. The owner/operator shall vent Source S-97 emissions to Abatement Device A-626, two activated carbon vessels, arranged in parallel at all times, while two additional spare vessels are connected and on standby. The owner/operator of S-97 and A-626 shall not exceed 2,911 scfm. (basis: Cumulative Increase, Odor Control, Offsets)
5. The owner/operator of S-97 shall not exceed 10 ppmv (measured as methane, C1) at the outlet of both Activated Carbon Vessels (A-626).  
(Basis: Regulation 2-2-208 Cumulative Increase)
6. The owner/operator of S-97 shall monitor for TOCs/POCs with a GC analyzer, flame-ionization detector (FID), or other method approved in writing by the Air Pollution Control Officer at the following locations:
  - a. At the inlet to the carbon vessel that are in operation.
  - b. At the outlet of the carbon vessel that are in operation.When using an FID to monitor breakthrough, readings may be taken with and without a carbon filter tip fitted on the FID probe. Concentrations measured with the carbon filter tip in place shall be considered methane for the purposes of these permit conditions. (basis: Cumulative Increase, Offsets)
7. The owner/operator of S-97 shall record these monitor readings in a monitoring log at the time they are taken. The monitoring results shall be used to estimate the frequency of carbon change-out necessary to maintain compliance with Parts 5 and 8 and shall be conducted on a daily basis. (basis: Cumulative Increase)
8. The owner/operator of S-97 and A-626 shall change the last carbon vessel with unspent carbon upon detection at its outlet of 10 ppmv (measured as C1). (basis: Cumulative Increase)
9. The owner/operator of S-97 shall maintain the following records for each day of operation of the source:
  - a. Each monitor reading or analysis result for the day of operation they are taken.
  - b. The number of carbon vessels removed from service.
  - c. Quantities, vapor pressures and emission calculations of each type of material stored at S-97 on a daily basis.
  - d. Daily throughput and/or emission calculations of POC and/or NPOC shall be totaled for each month and consecutive twelve month period.(basis: Cumulative Increase)
10. All measurements, records and data required to be maintained by the owner/operator shall be retained and made available for inspection by the Air District for at least five years following the date the data is recorded. (basis: Cumulative Increase)
11. The owner/operator of S-97 shall not exceed all of the following:



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source Nos. A-626**

**Condition No. 27819**

**Plant No. 21359**

**Application No. 31157**

- a. Total POC emissions from S-97 shall not exceed 0.316 tons in any consecutive twelve month period;
- b. Total POC emissions from S-97 shall not exceed 1.7 pounds in any calendar day;
- c. Total NPOC emissions from S-97 shall be zero in any calendar day and/or in any consecutive twelve month period.

(basis: Cumulative Increase)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-126**

**Condition No. 27820**

**Plant No. 21359**

**Application No. 31157**

Amended by Renewed Fuel Project, Application 31157 (2022)

1. The owner/operator of S-126 shall ensure that following total throughput limits are not exceeded: 594,845 barrels of gasoline, naphtha and/or renewable naphtha combined in any consecutive rolling 12-month period; and/or 28,800 barrels of gasoline and/or renewable naphtha combined in any calendar day. [Basis: Cumulative Increase]
2. The owner/operator shall only store the following in S-126:  
Organic liquids with a reid vapor pressure less than or equal to 9 psia.  
[Basis: Cumulative Increase]
3. Deleted, recordkeeping is replaced by Part 5 in A/N 31157
4. The owner/operator of S-126 may use an alternate material(s) other than the specific materials specified in Part 1 and/or usages in excess of those specified in Part 1, provided that the owner/operator can demonstrate that all of the following are satisfied:
  - a. Total POC emissions from S-126 shall not exceed 1.682 tons in any consecutive twelve month period;
  - b. Total POC emissions from S-126 shall not exceed 9.2 pounds in any calendar day;
  - c. Total NPOC emissions from S-126 shall be zero in any calendar day and/or in any consecutive twelve month period;
  - d. The use of these materials does not increase toxic emissions equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.  
(Basis: Cumulative Increase; Toxics)
5. To determine compliance with the above parts, the owner/operator of S-126 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:
  - a. Quantities, vapor pressures, and emission calculations of each type of material stored at S-126 on a daily basis.
  - b. If a material other than those specified in Part 1 is used, POC, NPOC, and/or toxic component contents of each material used; and mass emission calculations to demonstrate compliance with Part 4 on a daily basis;
  - c. daily throughput and/or emission calculations shall be totaled for each consecutive twelve month period. All records shall be retained on-site at least for five years, from the date of entry, and made available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations. (Basis: Cumulative Increase; Toxics)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-341**

**Condition No. 27821**

**Plant No. 21359**

**Application No. 31157**

Amended by Rodeo Renewed Project, Application 31157 (2022)

1. The owner/operator of S-341 shall ensure that following total throughput limits are not exceeded: 1,819,583 barrels of gasoline and/or renewable jet combined in any consecutive rolling 12-month period; and/or 12,000 barrels of gasoline and/or renewable jet combined in any calendar day.  
[Basis: Cumulative Increase]
2. The owner/operator shall only store the following in S-341:  
Organic liquids with a true vapor pressure less than or equal to 3.0 psia.  
[Basis: Cumulative Increase]
3. Deleted, recordkeeping is replaced by Part 5 in A/N 31157
4. The owner/operator of S-341 may use an alternate material(s) other than the specific materials specified in Part 1 and/or usages in excess of those specified in Part 1, provided that the owner/operator can demonstrate that all of the following are satisfied:
  - a. Total POC emissions from S-341 shall not exceed 1.380 tons in any consecutive twelve month period;
  - b. Total POC emissions from S-341 shall not exceed 7.6 pounds in any calendar day;
  - c. Total NPOC emissions from S-341 shall be zero in any calendar day and/or in any consecutive twelve month period;
  - d. The use of these materials does not increase toxic emissions equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.  
(Basis: Cumulative Increase; Toxics)
5. To determine compliance with the above parts, the owner/operator of S-341 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:
  - a. Quantities, vapor pressures, and emission calculations of each type of material stored at S-341 on a daily basis.
  - b. If a material other than those specified in Part 1 is used, POC, NPOC and/or toxic component contents of each material used; and mass emission calculations to demonstrate compliance with Part 4 on a daily basis;
  - c. daily throughput and/or emission calculations shall be totaled for each consecutive twelvemonth period. All records shall be retained on-site for at least five years, from the date of entry, and made available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations. (Basis: Cumulative Increase; Toxics)

***End of Conditions***





**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-342**

**Condition No. 27822**

**Plant No. 21359**

**Application No. 31157**

Amended by Rodeo Renewed Project, Application 31157 (2022)

1. The owner/operator of S-342 shall ensure that following total throughput limits are not exceeded 2,407,700 barrels of gasoline and/or renewable jet combined in any consecutive rolling 12-month period; and/or 12,000 barrels of gasoline, and/or renewable jet combined in any calendar day.  
[Basis: Cumulative Increase]
2. The owner/operator shall only store the following in S-342:  
Organic liquids with a true vapor pressure less than or equal to 0.5 psia.  
[Basis: Cumulative Increase]
3. Deleted, recordkeeping is replaced by Part 5 in A/N 31157
4. The owner/operator of S-342 may use an alternate material(s) other than the specific materials specified in Part 1 and/or usages in excess of those specified in Part 1, provided that the owner/operator can demonstrate that all of the following are satisfied:
  - a. Total POC emissions from S-342 shall not exceed 0.394 tons in any consecutive twelve-month period;
  - b. Total POC emissions from S-342 shall not exceed 2.2 pounds in any calendar day;
  - c. Total NPOC emissions from S-342 shall be zero in any calendar day and/or in any consecutive twelve-month period;
  - d. The use of these materials does not increase toxic emissions equal to or above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.  
(Basis: Cumulative Increase; Toxics)
5. To determine compliance with the above parts, the owner/operator of S-342 shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:
  - a. Quantities, vapor pressures, and emission calculations of each type of material stored at S-342 on a daily basis.
  - b. If a material other than those specified in Part 1 is used, POC, NPOC and/or toxic component contents of each material used; and mass emission calculations to demonstrate compliance with Part 4 on a daily basis;
  - c. daily throughput and/or emission calculations shall be totaled for each consecutive twelvemonth period. All records shall be retained on-site for five years, from the date of entry, and made available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations. (Basis: Cumulative Increase; Toxics)

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-261**

**Condition No. 27823**

**Plant No. 21359**

**Application No. 31157**

Tanks is exempt in by Rodeo Renewed Project, Application 31157 (2022)

1. Deleted, exempt tank.
2. The owner/operator shall operate S261 with closed, gasketed covers on all tank openings except pressure relief valves and vacuum breaker valves. The owner/operator shall equip S261 with a BAAQMD approved roof with liquid mounted primary seal that meets the design criteria of BAAQMD Regulation 8-5-321.3 and secondary seal that meets the design criteria of BAAQMD Regulation 8-5-322.5. The owner/operator shall ensure that there are no ungasketed roof penetrations, no slotted pipe guide poles unless equipped with float and wiper seals, and no adjustable roof legs unless fitted with vapor seal boots or equivalent. [Cumulative increase].
3. Deleted, exempt tank.

***End of Conditions***



**Plant Name: Phillips 66 - San Francisco Refinery**

**Source No. S-340**

**Condition No. 27824**

**Plant No. 21359**

**Application No. 31157**

For Sources S340 (Tank 108). Amended by Application 31157 (2022), Tank will be exempt after startup of sources within AN 31157. New condition 27646, Part 21 requires notification for the permits in order to issue letters of exemption.

1. Deleted, exempt tank.
2. Deleted, exempt tank.
3. The owner/operator shall operate S340 with closed, gasketed covers on all tank openings except pressure relief valves and vacuum breaker valves. The owner/operator shall equip S340 with a BAAQMD approved roof with liquid mounted primary seal that meets the design criteria of BAAQMD Regulation 8-5-321.3 and secondary seal that meets the design criteria of BAAQMD Regulation 8-5-322.5. The owner/operator shall ensure that there are no ungasketed roof penetrations, no slotted pipe guide poles unless equipped with float and wiper seals, and no adjustable roof legs unless fitted with vapor seal boots or equivalent. [BACT, cumulative increase]
4. Deleted. Exempt tank.

***End of Conditions***

# **APPENDIX E**

## **Phillips 66 Odor Prevention and Management Plan**



# **Rodeo Renewed Odor Prevention and Management Plan**

**October 2023**



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### Table of Contents

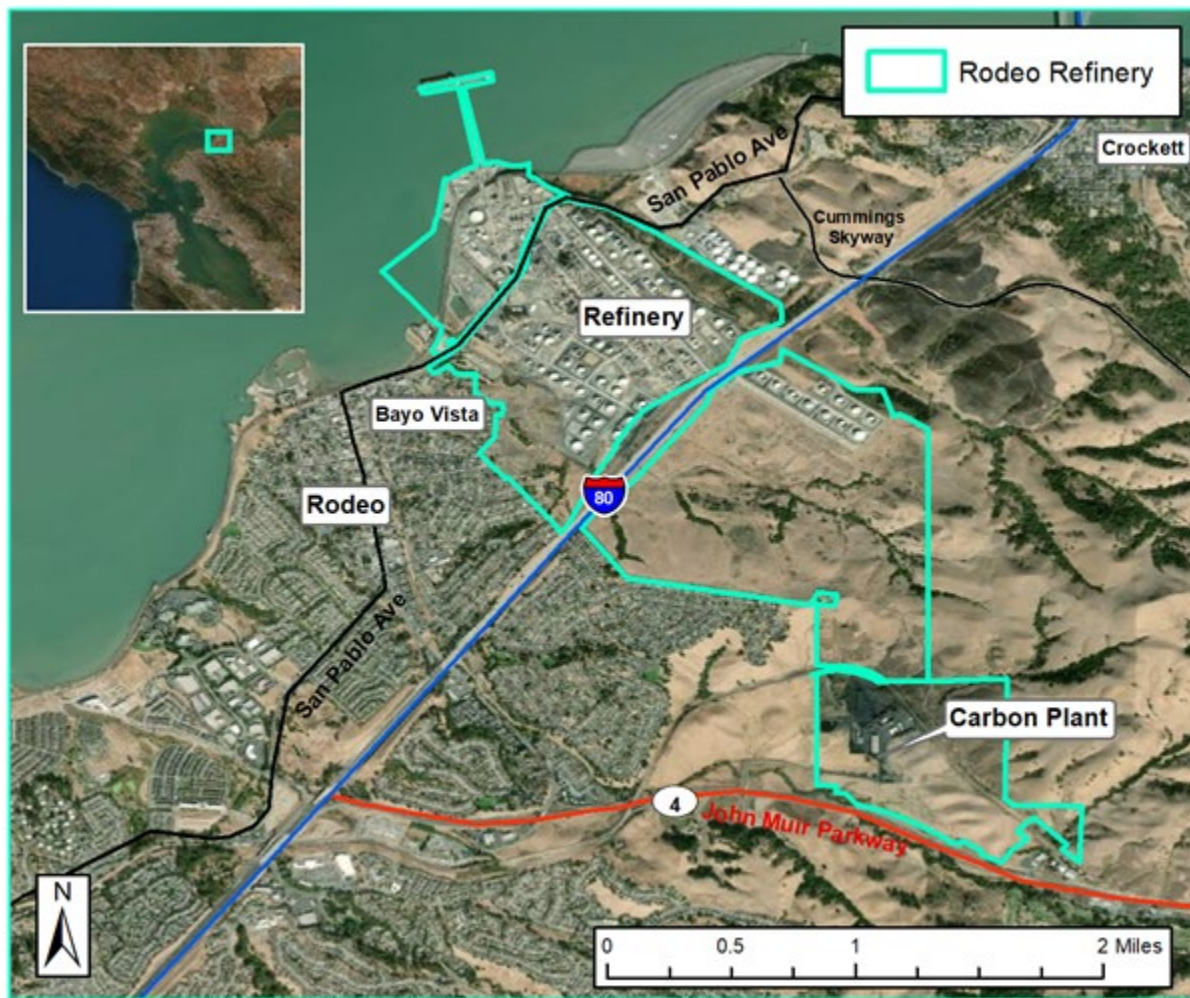
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## 1.0 Introduction

As shown in Figure 1-1, the Rodeo Refinery comprises approximately 1,100 acres of land, but the Rodeo Site is the 495-acre, developed portion of the property northwest of Interstate 80. The remaining portion of the Rodeo Refinery, southeast of I-80, consists of a tank farm and undeveloped land. The Rodeo Site is bordered by San Pablo Bay on the north and west, Interstate 80 on the southeast, the NuStar Energy tank farm on the northeast, and the Bayo Vista residential area of Rodeo to the southwest.

**Figure 1-1 Rodeo Refinery and Vicinity**



*Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community*

### 1.1 Background

The objective of the Rodeo Renewed project is to modify certain existing facilities and install new essential supporting facilities (e.g., feedstock pretreatment, etc.) to allow receipt and processing of a variety of renewable feedstocks, such as used cooking oil (UCO), international waste Fat Oil & Grease (FOG), beef tallow, soybean oil, etc. for producing renewable fuels.





Phillips 66 is planning to utilize as much existing equipment and infrastructure as possible for receiving, transferring, and storing future feedstocks and products. The project also includes a new renewable feedstock pretreatment facility unit (PTU) as an element of the Rodeo Renewed Project.

The current Phillips 66 Rodeo refinery has two existing hydrocrackers (Units 240 and 246) that will be converted for producing renewable naphtha, renewable diesel, and renewable jet fuel with minimal modifications.

Environmentally-responsible construction and operation, which preserves the natural characteristics and environmental features, is a primary objective of the project design. The project will comply with all federal and local environmental, health, and safety regulations and will incorporate good engineering practice and operation/maintenance policies and procedures to minimize environmental emissions and discharges.

**Figure 1-2. Rodeo Site Plot Plan and Project Equipment.**



## 1.2 Purpose of the Odor Management Plan

This Odor Management Plan will become an integrated part of daily operations at the Rodeo Renewed Facility (“Facility”), to effect diligent identification and remediation of any potential odors generated by the Facility. The purpose of this plan is to outline procedures that facility personnel shall use to address odor issues, facility wide.

The odor management plan will include continuous evaluation of the overall system performance, identifying any trends to provide an opportunity for improvements to the plan, and updating the odor management and control strategies as necessary.

## 2.0 Design Considerations for Odor Management

The first step in the process of controlling odors is designing active odor control measures into the facility. Techniques that can be used to reduce odor generation including reduction of volatile organic compounds



(VOCs) and odor generation by covering appropriate units with closed sealed covers, using fixed roof or floating roof storage tanks, reducing fugitive emissions, controlling and mitigating system upsets, and using scrubbing and incineration systems for vent gas streams.

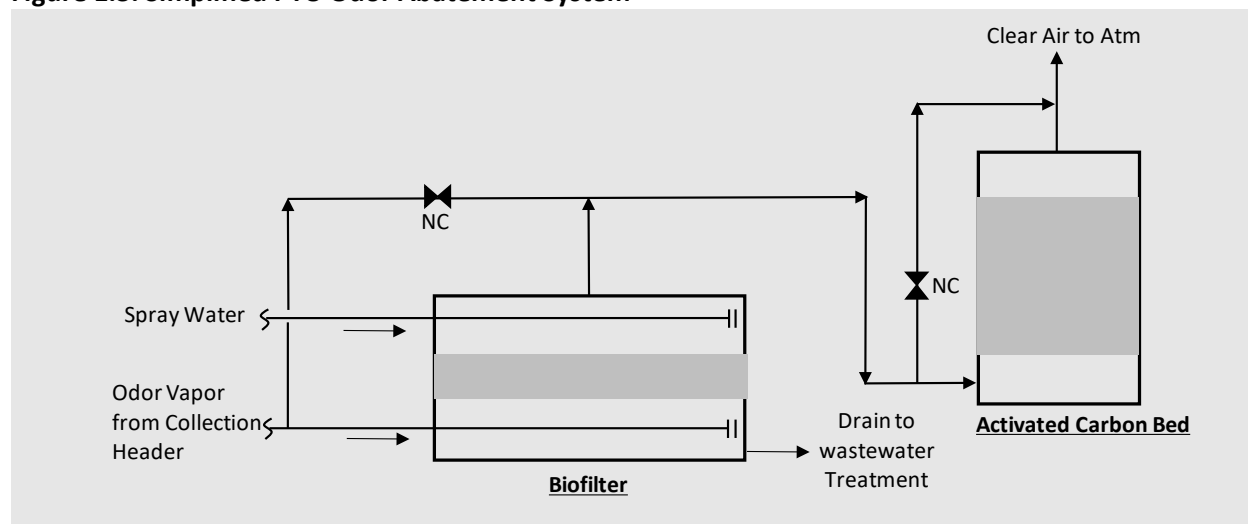
The main areas of focus are the areas where the renewable feedstocks are first unloaded from rail and marine vessels to Tank 100 (TK-100) and at the feedstock Pretreatment Unit (PTU).

Rail unloading odor abatement includes a pipe header system tied to a new activated carbon canister system. The system will have redundant blowers that provide suction to the header ensuring that rail cars connected to the system will operate at slightly negative pressure, so potential odors are not released to the environment. The new activated carbon canister system contains two beds in series to ensure that odorous components are reduced to below detectable levels prior to release to the atmosphere. Any breakthrough that occurs on the first canister is controlled by the second canister and the saturated bed can be replenished without disrupting the odor abatement control of the rail unloading system. All rail cars undergoing preheating or offload operation will be continuously attached to the odor abatement system until all contents are offloaded.

Tank-100 is being repurposed to store renewable feedstocks with a fixed roof and new tank vent system that utilizes a nitrogen gas blanket. The TK-100 vent system operates either as in-breathing nitrogen when feeding the PTU or as out-breathing to the carbon canisters when receiving material into the tank. The blanket gas will be discharged via new blowers through activated carbon canisters for odor abatement prior to release to atmosphere. Both blowers and the carbon canisters have on-line spares. The TK-100 vent system is designed with push-pull pressure control that can be set to operate at a slight negative pressure. This ensures that no untreated odor is released to the atmosphere. The carbon canisters are designed with two beds in series to ensure that potential odorous components are controlled prior to release to the atmosphere. Full sparing of the carbon canisters will ensure that odor abatement of TK-100 will not be disrupted when one set of carbon beds is saturated and require replenishment.

The Odor Abatement System at the Pretreatment Unit includes an odor-vapor collection system and an odor-vapor treatment unit, which consists of a biofilter followed by an activated carbon adsorption bed. The biofilter reduces odorous constituents from the collected vapor and the residual components discharged from the biofilter will be further treated by the activated carbon bed. A simplified Block Flow Diagram for the Odor Abatement System is shown in Figure 1.3.

**Figure 1.3. Simplified PTU Odor Abatement System**



### Odor-Vapor Collection System

Using a suction fan/blower, the Odor Abatement System will draw vapors from the head space of all ambient liquid tanks/vessels in the PTU that could have potential odor-causing vapors. The system is designed for five air exchanges per hour of head space volume to effectively prevent the emission of odorous vapors to the atmosphere prior to treatment. All vessels and tanks directly venting to the odor abatement system will operate under a slight vacuum to ensure no odor is released to the atmosphere from an individual source. For the vessels operated under vacuum, the non-condensable vapor discharged from the vacuum ejectors and blowers will also be directed to the Odor Abatement System for odorous constituent removal.

### Biofilter

Azzuro's Biotrickling filter technology with activated carbon bed combined system has been selected as the odor management system at the PTU. The multi-stage Biotrickling reactor is sized and optimized to maximize the contact time with the highest contact area available in the market. This system has been utilized successfully in several market sectors including municipal wastewater units, agriculture and food processing units, biogas desulphurization processing solutions, petrochemical, rendering plants and cellulose processing facilities.

The heart of the system is the patented spacious wire pac media, which has a unique structural design with high surface area per volume ratio, with a demonstrated higher odor removal efficiency (>99%). It is compression resistant (does not shrink) and has an excellent resistance to low pH and organic solvents, thus allowing for a longer life with a 20-year warranty. This media creates an ideal substrate for the bacteria to colonize and flourish, and in doing so, creates the maximum surface area for bacteria to be in contact with the recovered air. This system also does not require water recirculation as it is able to maintain a favorable condition for the bacteria on the patented media.

The system has three stages to mitigate odorous components in the air flow:

- Stage 1 – inorganic odors are oxidized at the low pH by autotrophic bacteria



- Stage 2 – all other odorous components like fatty acids, and VOCs are biologically oxidized at a neutral pH by heterotrophic bacteria
- Stage 3 – the final stage consists of activated carbon treatment as a polishing stage

The PTU odor abatement includes two parallel biofilters that allow for one of the biofilters to be isolated for maintenance while the other is in operation. This redundancy ensures sources in the PTU are abated at all times in the event one biofilter is isolated for maintenance. The redundant activated carbon beds alone are sized to provide sufficient odor abatement for the entire PTU in the unlikely event both biofilters are offline at the same time. This will allow additional flexibility and redundancy if both biofilters are to be temporarily offline during maintenance periods without shutting down the complete system.

This technology was selected based on proven history of operating in multiple industries for over 20 years. The system is a product based on years of research and development and has proven superior performance, both in industrial and municipal applications.

#### **Activated Carbon Adsorption Bed**

An activated carbon adsorption bed is a proven technology for removing odorous constituents from vapor streams. Activated carbon beds alone are designed to be sufficient for odor abatement; however, the proposed 2-stage system with biofilter and activated carbon bed provides a robust solution for odor abatement during steady state operations and maintenance. During normal operation when both biofilters are operational, the carbon polishing stage has very minimal adsorption loading. This extends the useful life of the carbon adsorption bed for several years before replenishment is required, thereby reducing the generation of non-hazardous waste.

### **3.0 Odor Monitoring Program**

The odor monitoring program described below has been designed to provide guidance for the proactive identification and documentation of odors through the utilizing of self-inspections and odor compliant investigations. In addition, this program outlines the general methods by which odor sources can be identified and resolved.

#### **3.1 Identifying the Presence of Odor**

The first step in the process of controlling odors is to determine if the odors are present. This is done through routine employee observations, self-inspections, and odor complaint investigations.

##### **Routine Employee Observations**

When any on-site facility employee detects an odor that has sufficient intensity or volume that it could lead to detection off-site, it will be reported to Shift Supervision to investigate to determine the source of the odors. Once the source of the odors are determined, the refinery staff will respond to mitigate the odor source and restore the area to normal operations. Such on-site investigation, reporting, and remediation of odors are inherent components of the site's standard operating procedures.

##### **Self-Inspection**

The primary objective of this method is to identify and mitigate odors from the facility before the odors can result in off-site migration. This is accomplished through routine operational self-inspections. The self-



inspection will be performed at random times with daily and weekly variability until meaningful trend data is collected to ensure that trending data is not biased by a pattern in self-inspection.

### **Odor Complaint Investigation**

Phillips 66 strives to be a good neighbor and a contributor to the local community. All odor complaints received by the facility will be investigated. Investigation will begin within 1 hour, or as soon as is practical within the confines of proper safety protocols and site logistics. The goal of the investigation will be to determine if an odor originates from the facility and, if so, to determine the specific source and cause of the odor, and then to remediate the odor. Upon receipt of an odor complaint, the Facility's REOP-11-OPS EMERGENCY - Odor Complaint Investigation and CWS Notification Requirements procedure will be followed. Sources or processes determined or suspected to contribute to offsite odors shall be mitigated or otherwise controlled as soon as practicable and no later than within 24 hours of receiving the offsite odor complaint.

### **3.2 Odor Management**

Odor management and relief system management are inter-related. Odor management, for the purposes of this plan, will be the temporary measures employed during any facility maintenance activity that has the potential to generate odors.

Prior to any maintenance activities, pre-job planning and procedures are in place for the safe flushing and clean out of the equipment, vessel, piping, etc., prior to opening the system for maintenance work. This prevents any odor causing issues. Having several other programs such as Leak Detection and Repair (LDAR) programs, and Fenceline Monitoring also work in conjunction and support the overall odor management at the facility.