NOC Project Description Attachment Application No. PL15-0106, RI-NU Wastewater Treatment Facility

Project Description: The applicant requests the reinstatement and modification to CUP 960 to authorize the continued operation of, expansion of, and various operational changes to, the existing Community Sewage Treatment Facility (Case No. PL15-0106) until August 30, 2040.¹

The applicant seeks to continue to accept, treat and dispose offsite by trucks and by sewer discharge various types of non-hazardous waste streams. The applicant proposes to continue to utilize the existing 12-mile sewer discharge pipeline² connected to the City of Oxnard's Wastewater Treatment Plant for discharge of various non-hazardous waste streams (Attachment 8). The applicant proposes to continue to treat and discharge industrial and commercial waste material to the City's Wastewater Treatment System.

Non-Hazardous Waste Streams Accepted

The following domestic and industrial non-hazardous waste streams are proposed to be treated and disposed of at the wastewater facility in accordance with local, state, and federal requirements that regulate the safe handling of equipment, and the treatment and disposal of these types of waste streams:

- <u>Domestic Wastes:</u> Wastes such as septic tank waste; port-a-potty waste and secondary sewage. The proposed lab and office will contain restroom facilities that will be connected to a common discharge point into the existing sewer line.
- Industrial Wastewater Containing Metals (40 Code of Federal Regulations (CFR) Part 437 Subcategory A wastes): Wastes such as neutralized acid wastewater, boiler blowdown brine, and metal finish wastewater.
- Industrial Wastewater Containing Organics (40 CFR Part 437 Subcategory C wastes): Wastes such as solvent bearing wastes, contaminated groundwater clean-up from non-petroleum sources, landfill leachate, floral wastewater and tank clean-out fluids from organic non-petroleum sources.

¹ CUP 960, as modified by LU06-0011, was originally approved to authorize the operation of the SCWW facility until August 30, 2040.

² The SCWW facility had been operating its 12-mile wastewater pipeline pursuant to County Franchise 1.10.88, which was granted by the Board of Supervisors on April 26, 1999 and renewed/amended by the Board of Supervisors on October 25, 2011.

- <u>Oily Wastewater (40 CFR Part 437 Subcategory B wastes)</u>: Wastes such as materials from oilfield wastewater, oil spills, oil-water emulsions, contaminated groundwater from petroleum sources, bilge water and aqueous and oil mixtures from parts cleaning operations.
- <u>Oilfield Sludge Wastes:</u> This category includes the following:
 - <u>Oilfield Drilling Muds</u>: Used drilling muds and cuttings generated during the drilling of oil and gas wells.
 - <u>Oilfield Tank Bottoms</u>: Solids removed from the bottom of storage tanks used in the production of crude oil.

Non-Hazardous Waste Acceptance Practices

Industrial waste generators (i.e., the facility's customers) will be required to conduct laboratory analysis of their waste streams to ensure they are not hazardous waste prior to sending them to the facility for treatment and disposal. The waste generators will submit a "profile application" of the proposed waste stream to the facility for approval. The waste generators will also submit an actual sample of the proposed waste stream to the facility. The applicant will compare the waste stream sample to the profile description and will conduct internal sample analyses in the proposed in-house laboratory to compare to the third party analytical submitted by the waste generator. The proposed in-house laboratory will be used only for internal testing and will not be a state-certified lab used for complete waste profiling.

The applicant will also conduct bench scale treatability testing to ensure the treatment process can reduce the waste stream contaminants to levels below the facility's discharge limits. Even if the waste stream proves to be non-hazardous, if it cannot be treated sufficiently, it will not be accepted at the facility. If the physical inspection of the waste stream sample matches the profile description and the facility's in-house laboratory analyses are consistent with the third party analytical results, the applicant will allow the generator to schedule delivery of the waste to the facility.

All wastes will continue to be delivered by truck to the facility. When a waste generator's truck arrives at the facility to transfer the waste, the facility will conduct the following check for each load:

- a. A sample of the waste stream will be taken from the delivery truck before it is unloaded and physically compared to the original waste stream sample supplied by the generator.
- b. The facility's in-house laboratory will then conduct additional "fingerprint" analyses of the sample from the delivery truck. This may include checking pH, flash point, metals content, etc.

If the waste load fails either the physical inspection or the analytical "fingerprint" check, it will be rejected, and the truck will leave the facility without unloading the waste. The load check process will take approximately 30 minutes to complete.

Waste streams process flow diagrams are included as Attachment 9.

Unloading of Non-Hazardous Wastes Process

Trucks, other than those carrying domestic waste, will unload at the main offloading area located at the southern side of the facility. The trucks will unload via hose into a piping manifold that leads to cone bottom waste receiving tanks. The main offloading area is paved and bermed. Domestic waste will be offloaded using hoses into cone bottom tanks at the domestic sewage area. The piping manifold for unloading domestic sewage will be located within the bermed area proposed to surround the domestic waste cone bottom receiving tanks. Other than the use of hoses to unload waste hauling trucks, transfer of fluids and waste materials to and from the waste processing equipment will be via pumps and hard piping in conformance with local, state, and federal regulations.

Hazardous materials (chemicals) used during the waste treatment process will be stored near the point of use in "day tanks" which will be placed on top of spill containment trays. These day tanks will be hard piped into the process equipment. The day tanks will be refilled, as needed, from the hazardous materials containers stored in the proposed hazardous materials storage building.

Treatment Methods for Non-Hazardous Wastes

The facility will utilize separate treatment systems for industrial and domestic wastes. The proposed treatment methods for industrial waste include:

- Dewatering with shakers and centrifuges;
- Solids settling and removal using clarifiers;
- pH adjustment using either acid or base;
- Metals removal using hydroxide precipitation (adjusting pH to make metal compounds insoluble and precipitate from solution);
- Oil skimming using an oil-water separator;
- Organics and residual oil removal using a gas energy mixing (GEM) system. A polymer is added before the liquids are sent through the GEM system. The GEM system uses air and the polymer to form a flocculent which floats organics and solids to the surface for skimming and removal;
- Organics oxidation through ozone oxides the organics converting them to water and carbon dioxide; and,
- Additional filtration utilizing bag filters, sand filters, organo-clay filters and granulated activated carbon filters.

Prior to treatment, waste streams will be tested at the facility and characterized as either 40 CFR part 437 Subcategory A, B, or C wastes depending on the levels of metals, organics, and oil found in the waste streams. Sludges generated by the waste treatment process are de-watered and/or mixed with clean, inert material and hauled offsite to a licensed landfill for ultimate disposal. Solids generated from industrial and oilfield waste treatment will be sent to the Chiquita Canyon landfill in Castaic operated by Waste Connections. The treated non-hazardous wastewaters generated by the waste treatment process will be discharged into the City of Oxnard's Wastewater Treatment Plant by means of an existing 12-mile sewer pipeline upon the issuance of a new Industrial Wastewater Discharge Permit from the City of Oxnard.

The proposed treatment methods of domestic waste include:

- Use of screens to remove large solids; and,
- Solid/liquid separation with a centrifuge.

The proposed system will be enclosed and designed to minimize odorous emissions. Solids will be dropped from the centrifuge through an enclosed chute into a closed top bin. Liquids will be sent to closed tanks and eventually into the existing sewer line connected to the City of Oxnard's Wastewater Treatment Plant. Bins of solids generated from domestic waste treatment will be sent to the Waste Management landfill in Simi Valley.

Proposed Modifications of CUP 960 (as previously modified by LU06-0011)

The applicant requests the following modifications to the existing permit:

In order to abate Violation Case No. PV15-0020, the requested modified CUP would legalize the unpermitted expansion of the facility's operational boundary by 1.67 acres. With the proposed expansion, the facility's operational boundary will encompass a total of 6.56 acres. Within the 1.67-acre expansion area, the applicant proposes a total of 29,362 sq. ft. of impervious surface: 26,335 sq. ft. was installed without permits and is proposed to be legalized (validated), and 3,027 sq. ft. of new impervious surface will be installed. Within the current permit boundary, there is a total of 104,566 sq. ft. of existing impervious surface. As part of the modification request, the applicant proposes the addition of 1,825 sq. ft. of impervious surface within the current permit boundary. The total impervious surface area of the current and the expansion permit area will be 135,753 sq. ft.

The applicant proposes to re-design the layout and operation of the existing facility so that the facility may operate safer, more efficiently, and the waste processing equipment is located further from the agricultural zoned areas that border the project site. As part of this process some existing equipment (i.e., old tankage and processing equipment) will be removed and replaced with new equipment. The reconfiguration of the facility will occur in one phase that is expected to take six to nine months to complete, and includes the relocation of processing operations closer to the center, eastern and northern portions of

the site and utilizing the southwest corner for administrative office functions.³ The facility will include over 1,000,000 gallons of tank storage capacity onsite at any one time (refer to Tables 1 and 2 below).

An outfall into the Cummings storm drain for a "non-brine discharge stream" was approved for installation pursuant to Major Modification LU06-0011 but was never installed. The applicant requests to remove this component from the project and will not install a separate outfall.

The applicant proposes to implement the following operational policy changes as part of the proposed project:

- The facility will no longer accept any wastewater contained in totes. The only totes allowed on the premises will contain clearly-marked and labeled chemical treatment products. Additional and targeted safety training to reinforce the new policy that all liquid materials in totes are to be considered "product" and shall never be handled or processed as wastewater, along with posted detailed protocols and reminders, and listed potential sanctions for any violations.
- The chemical treatment products and any other hazardous materials not being actively used in the treatment process will be stored inside a separate dedicated hazardous materials storage building.

Tables 1 and 2 below identify the existing (E) and proposed (P) equipment and structures, respectively, the sizes of each, and an identification marker that correlates to the proposed site plan of the facility (Attachment 10). The proposed re-design of the facility includes fewer tanks and less processing equipment than what was approved under the suspended permit.

Site Plan ID	Description	Size in Sq. Ft.	Status
А	Receiving Bays (4)	2,400	E
В	Trash/Grit Removal Unit	681	E
CL1-5	Clarifier Units (5)	1,600	E
D1	Centrifuge Unit	31	E
D2	Centrifuge Unit	31	E
D3	Centrifuge Unit	31	E
К	Maintenance Shed	320	E
N1	Sea Container (records storage)	320	E
N2	Sea Container (parts storage)	320	E
N3	Sea Container (parts storage)	320	E

Table 1 – Existing (E) Pads, Equipment and Structures to Remain

³ These activities are considered "construction" in the impact analysis. All other activities referenced in this impact analysis are considered "operational" activities.

Site Plan ID	Description	Size in Sq. Ft.	Status
AA	3 – Concrete pads	8,575	E
1	10 – 20,000-gallon waste receiving tanks	3,360	E
2	10 – 20,000-gallon process tanks	3,360	E
3	5 – 20,000-gallon process tanks	1,680	E
5	14 – 20,000-gallon process tanks	4,704	E
14	Shipping Pit	231	E
18	Diesel Fuel Tank (w/secondary containment)	126	E
20	Stockpile storage and recycle area (Mix Areas 1 & 2)	8,800	E
22	One VCAPCD Control Device	n/a	E

Table 2 – Proposed (P) Pads, Equipment and Structures

Site Plan ID	Description	Size in Sq. Ft.	Status
D	Mixing Tanks (6+)	828	Р
E	Electro-Coagulation Unit or other Metal Removal Unit	145	Ρ
F1	Ozone Unit	237	Р
G	Gas Energy Mixing (GEM) Unit	1,270	Р
Н	Modular Office	1,056	Р
J	Modular Laboratory	648	Р
L	Modular Employee Changing Room/Break Room	864	Р
BB	2 – Shaker Units (screens)	252	Р
HH	Skim Tanks (2)	226	Р
4	46 – 6,000-gallon cone bottom process tanks	2,944	Р
12	Sand Filters (6 to 8)	300	Р
13	Portable Water Tanks	128	Р
16	Carbon Filters	237	Р
17	Filter Units (organo-clay)	237	Р
19	pH Adjustment Tank	226	Р
21	Two reverse osmosis units	15 each	Р
23	Concrete pad (4,850 sq. ft. in area)	4,850	Р
25	Hazardous Materials Storage Building	610	Р
26	Oil/water separator	119	Р

As identified in Table 2, above, in addition to the removal and/or replacement of various equipment, the modified CUP would also include the authorization to install four new buildings on the site (Refer to Attachments 10 and 11):

<u>New 1,056 sq. ft. Office (labeled as "H" on the site plan and in Table 2, above)</u>: The 1,056 sq. ft. (24 feet x 44 feet) modular office will be used at the facility by personnel for administrative functions relating to the facility operations, which includes but not limited to scheduling waste shipments and maintaining shipping manifests. The office will include a restroom.

<u>New 648 sq. ft. Laboratory (labeled as "J" on the site plan and in Table 2, above)</u>: The 648 sq. ft. (54 feet x 12 feet) modular laboratory will contain the laboratory analytical equipment and include space for lab technicians needed to test incoming waste loads to be sure they are the same as the waste streams profiled and do not exceed hazardous waste criteria. The laboratory will be used to conduct bench scale treatability testing to be sure the facility treatment processes can reduce the waste stream contaminants to levels below the facility's discharge limits. The laboratory will be equipped with laboratory sinks and an emergency shower/eyewash station. The laboratory will include a restroom.

<u>New 610 sq. ft. Hazardous Material Storage Building (labeled as "25" on the site plan and in Table 2, above</u>): The 610 sq. ft. (61 feet x 10 feet) metal hazardous materials storage building will be used to store any hazardous materials (i.e., treatment chemicals) that are required for the treatment processes used to treat the incoming waste streams. The applicant proposes to store these materials and chemicals, when not in use in the treatment processes, inside this separate dedicated hazardous materials storage building. This building will be spill contained and have separate storage areas to allow for segregation of incompatible hazardous materials (e.g., store acids separately from caustics). This building will not include any plumbing or restroom facilities.

<u>New 864 sq. ft. Employee Changing/Break Room (labeled as "L" on the site plan and in</u> <u>Table 2, above)</u>: The 864 sq. ft. (36 feet x 24 feet) modular changing/break room building is intended to provide employees a place to change into and out of their work clothing and boots, take breaks, and eat lunches inside a shaded and cooled structure. Additionally, this building will be used to store safety equipment, such as respirators and Tyvek suits, and will have benches, lockers, a table and chairs. This building will not include any plumbing or restroom facilities.

There are four existing showers/eye wash stations that are spaced throughout the facility so that employees will have quick and easy access, if needed. One additional shower/eye wash station is proposed inside of the proposed laboratory building.

The modified CUP will authorize a change in facility operating hours and truck delivery schedules to include the following:

Authorized Actions	Days and Hours		
Plant Operation – Waste	24 hours/day, 365 days/year (for onsite treatment		
Processing Operations	operations)		
All Truck Deliveries to and from the Facility	Monday through Friday, 7:00 a.m. to 7:00 p.m. Saturday, 8:00 a.m. to 3:00 p.m. No Trucking Deliveries or Shipping on Sunday Except Emergencies ⁴		

Table 3 – Proposed Operating Hours and Truck Delivery Schedule

⁴The Planning Director would determine if the situation constitutes an emergency and whether the off-hours acceptance of materials would be authorized on a case-by-case basis.

The truck delivery limits specified in Table 3 above shall not be exceeded, but the limits may be altered for a period of time for emergencies through prior written authorization from the Planning Director or his/her designee based upon good cause being shown and substantially documented by the permittee.

The modified CUP will authorize a change to the truck trip limits by removing the distinction between the delivery trips and outgoing waste trips and authorizing an overall truck trip limit. Table 4, below, summarizes the existing truck trip limits:

Table 4 – Existing Truck Trip Limit

Trip Type	Weekly Trucks
Supply Deliveries	4
Outgoing waste and recyclable product	16
Waste Deliveries	480 (80 per day, 6 days/week)
CUP Weekly Total	500
Average Trucks/Day	83.3
Average Daily Trips (ADT)	166.6

The proposed truck trip limit changes below in Table 5 represent no increase in weekly truck trips.

Table 5 – Proposed Truck Trip Limit

Trip Type	Weekly Trucks
All Delivery Trucks (incoming and outgoing wastes, supplies, etc.)	500
Average trucks/day	83.3
Average daily trips (ADT)	166.6
Daily maximum truck limit	100
Daily maximum trips (ADT)	200

Historically, wastewater conveyance treatment services agreements entered into between the City of Oxnard and the subject facility allowed up to 600,000 gallons per day of treated wastewater to be discharged by the facility into the City's sewerage system connected to the existing 12-mile pipeline. Based on the requested 83.3 (average) to 100 (maximum) delivery trucks per day, the facility may receive between 400,000 and 500,000 gallons per day of non-hazardous waste for treatment:

83.3 average truck/day x 120 barrels(bbl))/truck x 42 gal/bbl = 419,832 avg gal./day 100 maximum truck/day x 120 bbl/truck x 42 gal/bbl = 504,000 max gal./day

Since waste discharges may not occur every day, there may be days where discharges exceed 500,000 gallons per day. The modified CUP restricts the number of waste delivery trucks to the facility on a daily and weekly basis, as listed in Table 5, but does not place restrictions on the daily amount of waste discharged into the City's sewerage system,

which is covered by the final Waste Discharge Permit issued by the City of Oxnard. The facility includes over 1,000,000 gallons of tank storage capacity onsite at any one time.

The modified CUP will authorize a change to the number of employees at the facility. The existing permit authorizes 15 employees. The applicant proposes an additional 25 employees (increase from 15 to 40 employees). This will result in two work shifts with 15 employees at the facility (mornings and afternoons) and one work shift with 10 employees at the facility (graveyard shift when no incoming waste trucking occurs). The additional employees will serve expanded operating hours and ensure compliance with local, state, and federal regulations on a 24-hour period.

The modified CUP will authorize the installation of 26,862 sq. ft. (9.8 percent of the CUP area) of landscaping, which will include 128 new trees and 183 new shrubs and lowgrowing plants as illustrated on the applicant's conceptual Landscape and Planting Plan (Attachment 12). Landscaping will be located within the new parking lot area, adjacent to the proposed office building, and along the perimeter of the project site. There will be no internal landscaping near any processing equipment. All proposed landscaping will be installed prior to the issuance of a Zoning Clearance for Use Inauguration, i.e., prior to renewed operation of the facility.

The modified CUP will authorize a total of three driveways to the facility. The driveways along Mission Rock Road and Shell Road will help facilitate the safe and orderly movement of haul trucks throughout the facility. The facility entrance located along Shell Road, adjacent to the proposed office and visitor parking, will be restricted to visitor and employee vehicles only.

A total of 27 parking spaces will be provided at the facility to be used by employees and visitors, including one ADA accessible parking space.

The modified CUP will authorize a total of 23 exterior light fixtures: 20, 25-ft. tall polemounted lamps throughout the facility, and 3, 25-ft. mounted lights attached to the exterior of the proposed laboratory. All proposed lighting will be shielded, cut-off fixtures as shown on the applicant's proposed Lighting Plan (Attachment 13).

A proposed sign plan (Attachment 14) prepared by the applicant shows a freestanding identification sign measuring three feet tall by eight feet wide (24 sq. ft. sign area) and extending five feet and five inches above grade, located 15-feet from the street-side property line. The proposed sign plan also includes all interior signage that cannot be viewed from the public roadway, such as employee safety protocol and directional signage.

Within the CUP boundaries there are two existing, inactive oil wells which are not part of the proposed project: SPS 29, which is abandoned; and, SPS 17, which is an active water supply well currently owned by California Resources Corporation. The proposed project's components will not interfere with the accessibility requirements for either well.

Water service will continue to be provided by the City of Santa Paula by means of an existing 1.5-inch meter (Meter #11314216). Individual sewer service for the facility's employees will be provided by the City of Oxnard by means of the existing 12-mile sewer pipeline to the City's Wastewater Treatment Plant, upon issuance of a Sewer Will-Serve Letter from the City of Oxnard.