

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) DRAFT INITIAL STUDY/CHECKLIST AND NEGATIVE DECLARATION FOR GENERAL WASTE DISCHARGE REQUIREMENTS FOR DAIRY AND OTHER CATTLE FACILITIES IN THE LAHONTAN REGION



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CALIFORNIA ENVIRONMENTAL QUALITY ACT DRAFT INITIAL STUDY/CHECKLIST AND NEGATIVE DECLARATION

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| ACRONTINS AND ABBREVIATIONS | | | |
|--|--|--|--|
| AB | Assembly Bill (State of California) | | |
| Basin Plan | Water Quality Control Plan | | |
| CAF | Confined animal facility | | |
| CARB | California Air Resources Control Board | | |
| CDPH | California Department of Public Health | | |
| CDFW | California Department of Fish and Wildlife | | |
| CEQA | California Environmental Quality Act | | |
| CH4 | Methane | | |
| Clean Water | Federal Water Pollution Control Act of 1972 | | |
| Act | | | |
| CO2 | Carbon dioxide | | |
| CWC | California Water Code | | |
| DWR | Department of Water Resources | | |
| EIR | Environmental Impact Report | | |
| ESA | Environmental Species Act | | |
| gpd | Gallons per day | | |
| GHG | Greenhouse gas | | |
| H2S | Hydrogen sulfide | | |
| Lahontan Lahontan Regional Water Quality Control Board | | | |
| Water Board | | | |
| LAMP | Local Area Management Plan | | |
| LAA | Land application area | | |
| OPR | Office of Planning and Research | | |
| Porter- | Porter-Cologne Water Quality Control Act of 1969 | | |
| Cologne Act | | | |
| OWTS Policy | Water Quality Control Policy for Siting, Design, and Operation | | |
| | and Maintenance of Onsite Wastewater Treatment Systems | | |
| ROWD | Report of Waste Discharge | | |
| SB | Senate Bill (State of California) | | |
| TDS | Total dissolved solids | | |
| USFW | United States Fish and Wildlife Service | | |
| USGS | United States Geological Survey | | |
| WDRs | Waste discharge requirements | | |
| WQO | Water Quality Order | | |
| | | | |

ACRONYMS AND ABBREVIATIONS

1. KEY INFORMATION

1.1. Project Title

General Waste Discharge Requirements (WDRs) for Dairy/Cattle Facilities in the Lahontan Region (General Order).

1.2. Purpose and Organization of this Document

The Lahontan Regional Water Quality Control Board (Lahontan Water Board) is preparing a General Order for waste discharges to land at confined animal facilities (CAFs) housing dairy cows and cattle. This initial study is prepared to address the California Environmental Quality Act (CEQA) requirements for the discretionary action of adopting a General Order and the resulting potential foreseeable effects on the environment that waste management system (collection, transfer, storage, and disposal) at CAFs may have.

The purpose of this Initial Study is to evaluate the reasonably foreseeable potential environmental impacts that may occur because of adopting the General Order. The objective of the General Order is to streamline the regulatory process for CAFs wastewater discharges to land.

The document is organized as follows:

- Key Information describes the purpose and organization of this document.
- Description provides background information about the project location, regulatory setting, environmental setting, and facilities requiring project implementation.
- CEQA Environmental Checklist uses the environmental factors provided in the CEQA Guidelines' Environmental Checklist to evaluate a range of potential impacts and mitigation measures.
- Error! Reference source not found. outlines the determination based on a discussion of environmental factors.

As a discretionary action, issuance of the General Order fits the CEQA definition of a project (Public Resources Code [PRC], section 21065 [c]). The Lahontan Water Board, as the project's lead agency, has consulted with state responsible and trustee agencies before deciding whether a project's impacts are significant (PRC, section 21080.3; California Code of Regulations [CCR], title 14, section 15063) and prior to determining what type of CEQA document to prepare. The list of agencies consulted was developed with assistance from the California Office of Planning and Research.

1.3. Lead Agency

Under CEQA, the lead agency is the public agency with primary responsibility over the proposed project. The Lahontan Water Board is the lead agency under

CEQA for this project because of its regulatory authority over water quality in California and its role in developing the General Order.

1.3.1. Name and Address

California Regional Water Quality Control Board, Lahontan Region 15095 Amargosa Road, Building 2, Suite 210 Victorville, CA 92394

1.3.2. Contact Person

Ghasem Pour-ghasemi (760) 241-2434 ghasem.pour-ghasemi@waterboards.ca.gov

1.4. Stakeholder Interaction

1.4.1. Tribal Consultation

California Native American tribes traditionally and culturally affiliated with the project area were contacted pursuant to PRC, section 21080.3.1. Letters were sent to eight tribes. The letters informed the tribes of the project and offered an opportunity for consultation. Consultation was not requested by any of the Tribes.

1.4.2. Public Review and Comment

This initial study was made available for a 30-day public review and comment period as described in the Notice of Opportunity for Public Comment on the Initial Study Negative Declaration for the General Waste Discharge Requirements (WDRs) for Dairy/Cattle Facilities in the Lahontan Region (General Order). Written comments must be received during the comment period to be considered prior to the meeting.

Anyone with any questions about document availability or the public review and comment process should contact Ghasem Pour-Ghasemi at (760) 241-2434 or ghasem.pour-ghasemi@waterboards.ca.gov.

2. DESCRIPTION

2.1. Project Location and Overview

The proposed project consists of the Lahontan Regional Water Quality Control Board adopting and implementing a General Order for the management of process water, manure, and other organic materials at CAFs including the application of such materials to land. Currently, these discharges are either unregulated or regulated by individual WDRs. Adoption of this General Order is the project for the purposes of CEQA. The objectives of the project are to establish a General Order for existing CAFs, including any future potential new CAFs, expanded CAFs, and the reopening of inactive CAFs to adequately

facilitate a consistent approach to regulating and permitting CAF operations, improve and protect water quality, control and reduce sedimentation in surface waters and improve soil conservation, control and reduce adverse groundwater impacts, trap bacteria and other pathogens that cause waterborne illnesses, and monitor water quality trends and changes within CAF watersheds.

The Lahontan Water Board is the lead agency for the development and adoption of this General Order. As the lead agency, the Lahontan Water Board conducted an Initial Study in accordance with CEQA Guidelines. Based on the initial study, the Lahontan Water Board prepared a Negative Declaration.

The General Order is limited to facilities located within the Lahontan Region, as shown in Figure 1. The Lahontan Water Board will maintain discretion whether to enroll dischargers within the Lahontan Region in the General Order, issue individual WDRs, or implement another administrative mechanism.

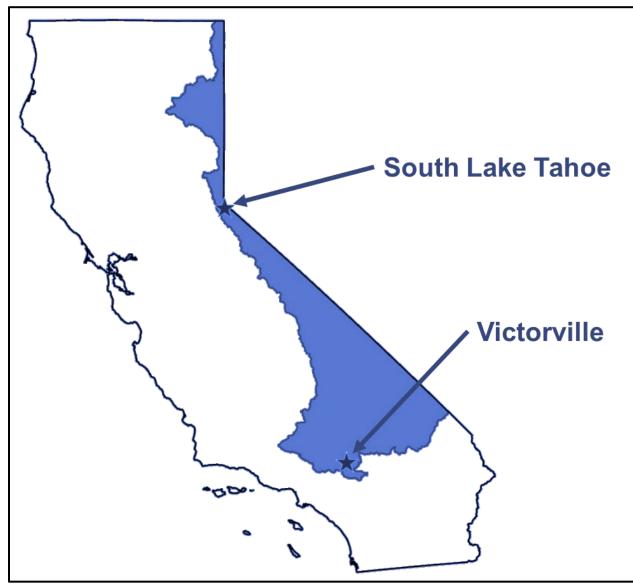


Figure 1—Lahontan Regional Water Quality Control Board boundary where the General Order will apply.

The General Order will cover discharges from existing CAFs and eligible new or expanding CAFs facilities in the Lahontan Region. Figure 2 shows locations of known existing CAFs within the Lahontan Region.

Federal lands, local land use zoning requirements, along with other factors such as water availability, will control where future facilities can be located or will not be allowed. For example, new CAFs would most likely not be located on most Federal lands (e.g., U.S. Forest Service [USFS], Bureau of Land Management [BLM], Department of Defense [DOD], and National Park Service [NPS], etc.), on land owned by the Los Angeles Department of Water and Power (LADWP), or in scenic areas such as within the Lake Tahoe basin.

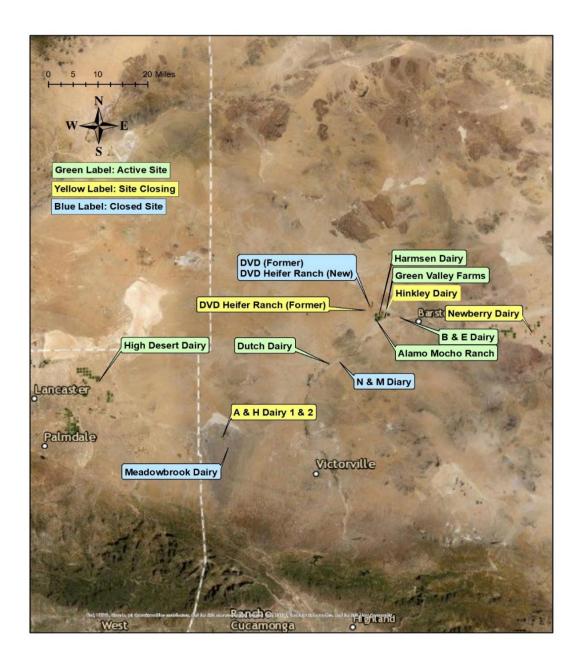


Figure 2—Map showing the Dairy and Cattle CAFs in the Lahontan Region.

The General Order will allow the Executive Officer to issue Notice of Applicability letters for eligible existing, expanded, or new confined animal operations. The waste to be regulated originates from production areas at facilities housing dairy/cattle, such as dairy cows, heifers, or cattle for feeding or slaughter. These

are specific facilities operating more than seasonally and with at least 50 animal units (AUs).

2.2. Scope of CEQA Analysis

This Initial Study has been prepared in accordance with PRC, section 21000 et seq. and CCR, title 14, section 15000 et seq. An initial study of a project is conducted by the lead agency pursuant to CEQA to determine if a project may have a significant effect on the environment. In accordance with the CEQA Guidelines, section 15064(a), an environmental impact report (EIR) must be prepared if there is substantial evidence (including the results of an initial study) that a project may have a significant effect on the environment. A negative declaration or mitigated negative declaration may be prepared if the lead agency determines that the project would have no potentially significant impacts or that revisions made to the project mitigate the potentially significant impacts to a less than significant level.

Waste discharges to land are regulated by the Regional Water Quality Control Boards (Regional Water Boards) that issue WDRs. WDRs require the discharge to conform to the Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act, also known as the California Water Code [CWC]), the Regional Water Board's Water Quality Control Plan (Basin Plan), and applicable policies of the State Water Board and Regional Water Boards. When discharges contain similar waste constituents and are treated using similar methods, general orders can be adopted to address applications more efficiently and consistently for coverage than WDRs.

The Lahontan Water Board has historically regulated discharges of liquid wash water and solid manure waste from large CAFs through individual WDRs. Only a few of the CAFs within the Lahontan Region have been issued an individual order. The General Order would regulate all active and existing CAFs and may be used to cover dischargers from any new or expanding CAFs.

Pursuant to CCR, title 14, section 15064 (d), a change that is speculative or unlikely to occur is not reasonably foreseeable and should not be considered in the environmental analysis. As such, this analysis focuses on the known effects associated with existing waste management system technologies as expected to be applied at new or existing CAF facilities.

The Lahontan Water Board has the discretion whether to use the General Order or require individual WDRs for regulatory coverage on a site-by-site basis. Furthermore, local land use authorities have discretion over approval, siting, and design of new and expanding facilities. Therefore, the Lahontan Water Board cannot speculate on how many facilities may be enrolled in, constructed, or expanded as a result of the General Order and is not able to determine the location or design of all facilities that may be constructed.

This Initial Study was prepared based upon potential impact of standard best management practices (BMPs) used in industry-standard waste management systems, including for existing and regulated CAFs. This evaluation makes no attempt to quantify the impacts from the construction and operation of non-standard or unknown waste management system technologies because it is speculative to estimate the type, size, and location of any future technology. The Lahontan Water Board also does not specify the methods in which dischargers can choose to comply with the General Order. Thus, the level of analysis is of a general nature and is commensurate with that level of detail. At the time of approval of a specific project, a project-level environmental analysis may be performed by the local approval agency.

The General Order is not expected to lead to any change in the quantity or type of discharge from existing facilities. For existing facilities, the adoption of the General Order is not expected to result in changes to existing baseline conditions except to the extent a requirement leads to updates or improvements to existing systems.

The type and location of any specific change to an existing system to comply with waste management requirements is speculative. Whether a discharger chooses to implement an update is dependent on site-specific conditions and the characteristics of the existing facility.

2.3. Regulatory Setting

A broad network of federal and state laws provides the State Water Board, Regional Water Boards, California Department of Public Health (CDPH), and local environmental and public health agencies the authority to protect beneficial uses of water, including the protection of drinking water and public health. That authority includes regulation of contaminants that have the potential to cause adverse water quality effects. These laws include the federal Water Pollution Control Act of 1972 (Clean Water Act), Safe Drinking Water Act of 1974, subsequent amendments to these laws, and California's Porter-Cologne-Act, subsequent amendments to the Porter-Cologne Act, and related state policies.

California has nine Regional Water Boards that work independently of each other but in cooperation with other state agencies and the environmental and public health agencies of the counties and cities. Additionally, the Regional Water Boards work with non-governmental entities, such as resource conservation districts, in pursuit of environmental and public health protections.

Statutes regulating WDRs are contained in the CWC); CWC, section 13260, requires each of the following persons to file a report of waste discharge (ROWD) with the appropriate Regional Water Board containing the information that may be required by the Regional Water Board:

a. A person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system.

- b. A person who is a citizen, domiciliary, or political agency or entity of this state discharging waste, or proposing to discharge waste, outside the boundaries of the state in a manner that could affect the quality of the waters of the state within any region.
- c. A person operating, or proposing to construct, an injection well.

CWC, section 13263, requires the Regional Water Board to prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge to implement any relevant water quality control plans (Basin Plans) and take into consideration the beneficial uses to be protected and nuisance to be prevented. CWC, section 13263(i), allows general WDRs for a category of discharges if certain criteria are met.

CWC, section 13264, prohibits Dischargers to initiate any new discharge of waste or make any material changes in any discharge, or initiate a discharge to, or make any material changes in a discharge to, or construct an injection well prior to the filing of a ROWD and issuance of WDRs or a waiver of WDRs.

2.3.1. Regulation of CAFs in the Lahontan Region

The following sections summarize the chronology of preceding water quality impact studies and Lahontan Water Board regulation.

2.3.1.1. Original Studies

In 1983, the California Department of Water Resources conducted a Water Boards-funded study on the hydrogeology and groundwater quality of the Lower Mojave River area. The study evaluated the potential impact to local water resources of waste disposal from dairies and other CAFs.

The Lower Mojave River study concluded water quality would be impaired from CAFs. Additionally, the impairment would be spatially differential, based on distance from the river. Land extending up to 1.5 miles on either side of the river's center line would be most rapidly impaired by percolating dairy waste. Groundwater outside that boundary could be impacted, but at a slower rate than in areas closer to the river.

2.3.1.2. Historic Permitting

In 1984, the Lahontan Water Board began issuing individual WDRs to regulate dairies within ½ mile of the Mojave River based on the study's predictions. The State Water Board's Dairy Waste Task Force issued guidelines in 1991 to facilitate consistent regulation of waste management at dairies throughout California. In the early 1990s, the Lahontan Water Board issued WDRs for dairies in the El Mirage area due to shallow groundwater and concern with waste discharges. Some of these CAFs have since closed or changed ownership. The Lahontan Water Board currently regulates four CAFs (A & H Dairy, B & E Dairy, Dutch Dairy, and N & M Dairy). N & M Dairy has closed, and A & H Dairy is pending closure. Two unregulated CAFs (Hinkley Dairy and Newberry Dairy) are

also pending closure. There are six active CAFs, namely, Alamo Mocho Ranch, B & E Dairy, Dutch Dairy, Green Valley Farms, Harmsen Dairy, and High Desert Dairy that will be regulated by the General Order.

2.3.1.3. Follow-up Monitoring

Groundwater monitoring is the most direct way to determine if management practices at a CAF are protective of groundwater quality. Groundwater samples may be collected from dedicated groundwater monitoring wells or from residential or agricultural wells.

Between 2009 and 2016, Lahontan Water Board staff conducted residential well sampling adjacent to CAFs to measure the impact of CAFs on groundwater quality. The sampling sites were adjacent to 10 of 13 dairies and heifer ranches in operation during that time.

Results from these sampling events indicated that the groundwater beneath and downgradient of eight studied CAFs contained higher concentrations of nitrate and total dissolved solids (TDS) than groundwater upgradient of those CAFs. Additionally, all downgradient groundwater concentrations of nitrate and TDS exceeded water quality objectives (WQOs) for these constituents (10 milligrams per liter [mg/L] and 500 mg/L, respectively, as established in the Basin Plan) at all eight CAFs.

Based on the most recent Self-Monitoring Reports (SMRs), the depth to groundwater for the current regulated facilities is as follows.

| Facility | Year Measured | Depth to Groundwater [Feet below ground surface] |
|-------------|---------------|--|
| A & H Dairy | 2022 | 50 - 68 |
| B & E Dairy | 2022 | 83 |
| Dutch Dairy | 2022 | 33 |
| N & M Dairy | 2020 | 10 - 42 |

| Table 1: Dep | oth to Grou | indwater at | Regulated | Facilities |
|--------------|-------------|-------------|-----------|------------|
| | | mamator at | regulated | i uomuos |

Initially, four CAFs were required by WDRs to sample groundwater monitoring wells installed for assessing impacts of waste discharges on groundwater. Data provided in submitted monitoring reports indicated that nitrate and TDS concentrations were increasing with time.

2.3.1.4. 2010 Dairy Strategy

After reviewing monitoring data from existing CAFs, the Lahontan Water Board considered a Dairy Strategy in May 2010¹, consisting of the following four components:

- Assess and address risk to downgradient receptors from exposure to polluted groundwater
- Identify appropriate source controls and require phased implementation of suitable waste minimization, control, and disposal practices under WDRs or a Conditional Waiver
- Ensure adequate monitoring to evaluate the extent of affected groundwater and the effectiveness of source control measures implemented
- Require groundwater remediation where groundwater beneficial uses are impaired

2.3.2. Other Water Board Orders Associated with CAFs

In addition to existing WDRs, the Lahontan Water Board adopted Cleanup and Abatement Orders (CAOs) for five existing CAFs as part of the Dairy Strategy. These CAOs require that the Dischargers provide affected residents downgradient of these facilities with replacement water for cooking and consumption. Additionally, Dischargers must sample residential wells every nine months and report the results to the Lahontan Water Board.

Through voluntary compliance, many existing CAFs have implemented best management practices (BMPs) to reduce waste load discharges. The General Order codifies some of these BMPs as requirements and changes the periodicity of groundwater sampling to every six months but makes no changes to residential replacement water requirements.

The General Order regulates discharges of waste from both existing and new CAFs but does not address the cleanup of existing degraded or polluted groundwater from historical or existing CAF operations. Any required cleanup actions are subject to separate actions under the CWC.

2.4. Environmental Setting

2.4.1. Bioregional Environmental Setting

California is divided geographically into bioregions, classified by relatively large areas of land or water, which contain characteristic, geographically distinct assemblages of natural communities and species. The biodiversity of flora,

¹ Agenda Item 7, meeting of May 12, 2010, Staff Report, *Evaluation of Potential Water Quality Impacts from Dairy Operations and Development of Regulatory Strategy.*

fauna, and ecosystems that characterize a bioregion tend to be distinct from that of other bioregions.

California contains a wide variety of bioregions, from desert environments below mean sea level, to coastal areas, to alpine areas of 14,000 feet above mean sea level (ft amsl) or more in elevation. The diversity of geography colliding with temperature and moisture leads to a significant diversity of biological resources. California has the highest total number of species and the highest number of endemic species within its borders than any other state. California also has the highest number of rare species (species typically listed under the federal Endangered Species Act [ESA] or the California ESA), and about one-third of those species are at risk, meaning these species have the potential for local or global extinction.

The Lahontan Region of California is divided into 3 bioregions: Modoc, Sierra, and Mojave Desert (Figure 3).

2.4.1.1. Modoc Bioregion

This bioregion is also referred to as the Modoc Plateau and the Southern Cascade region. The Modoc Bioregion extends across California's northeast corner from Oregon to Nevada, and south to the southern border of Lassen County. The physical geography of the region includes flats, basins, valleys, lava flows, and mountains. High desert and forests are the dominant vegetation communities. Several major lakes (Goose, Eagle, and Tule) and Mount Lassen (10,450 ft amsl in elevation) are dominant physical features. The bioregion shares many similarities with the Great Basin Bioregion that forms much of its eastern boundary. The area's large lakes provide critical habitat for migratory birds (United States Geological Survey [USGS], 2003).

Counties within this bioregion include all or portions of Plumas, Siskiyou, Butte, Tehama, Shasta, Lassen, and Modoc, which support relatively sparse population bases including the municipalities of Susanville and Alturas. This bioregion is comprised of the northern quarter of the Lahontan Hydrologic Region.



Figure 3—California Bioregions

2.4.1.2. Sierra Bioregion

The Sierra Bioregion is named for the Sierra Nevada Mountains that are approximately 380 miles long and extends from the Feather River in the north to

Tejon Pass in the Tehachapi Mountains to the south. The bioregion extends along California's eastern boundary and is largely contiguous with Nevada. It is bounded on the west by the Sacramento Valley and San Joaquin Valley Bioregions. Included in the region are the headwaters of 24 river basins extending to the foothills on the west side and the base of the Sierra Nevada escarpment on the east side (USGS 2003). These watersheds generate much of California's water supply provided by runoff from the Sierra snowpack.

Eighteen counties, or their eastern portions, make up the Sierra Bioregion: Alpine, Amador, Butte, Calaveras, El Dorado, Fresno, Inyo, Kern, Madera, Mariposa, Mono, Nevada, Placer, Plumas, Sierra, Tulare, Tuolumne, and Yuba. The larger cities include Truckee, Placerville, Quincy, Auburn, South Lake Tahoe, and Bishop (Forests Forever, 2018). This bioregion encompasses portions of the Lahontan, Central Valley, and Mojave Hydrologic Regions.

2.4.1.3. Mojave Desert Bioregion

The Mojave Desert Bioregion is in southern California, southern Nevada, northeastern Arizona, and southwestern Utah. In California, this bioregion comprises the southeastern portion of the state, roughly east of the Sierra bioregion to the Transverse Ranges in the west, where this region abuts the Colorado Desert near Twentynine Palms. The geography is defined by widely separated mountain ranges and broad desert plains, and ranges in elevation from 280 feet below mean sea level (ft bmsl) in Death Valley National Park to over 11,000 ft amsl on Telescope Peak. Much of the region is at elevations between 2,000 and 3,000 ft amsl.

Seven counties make up the Mojave Bioregion: nearly all of San Bernardino, most of Inyo, the southeastern tips of Mono and Tulare, the eastern end of Kern, the northeastern desert area of Los Angeles, and a piece of northern-central Riverside County. The largest cities are Palmdale, Victorville, Ridgecrest, and Barstow (Forests Forever, 2018). The Mojave Desert Bioregion is within the southern portion of the Lahontan Hydrologic Region. All existing CAFs within the Lahontan Region are in the Mojave Desert Bioregion.

2.4.2. Hydrology Environmental Setting²

Most of California is within one hydrological region, as defined by the USGS, but that region is further divided into 153 hydrological cataloging units (moderate-sized watersheds). Because the ultimate determinants of the availability of surface water and groundwater resources within the individual Regional Water

² General hydrology descriptions were adapted from: Planert, M. and J.S. Williams. 1995. Groundwater Atlas of the United States: California, Nevada. HA 730-B. United States Geological Survey. USGS webpage: < https://pubs.usgs.gov/ha/ha730/ch_b/ >; Cal Water. 1999. California Interagency Watershed Map of 1999.

Boards are the climatic patterns, this section provides a brief overview of the key hydrological elements for California.

2.4.2.1. Precipitation

There is relatively abundant precipitation in the state, but most of the precipitation is concentrated in areas remote from most large urban centers and major agricultural areas. Much of the climatic variation in the state results from the patterns of global weather systems, oceanic influences, and the location and orientation of the mountains. As shown in **Figure 4**, northern California is much wetter than southern California, with more than 70 percent of the average annual precipitation and runoff occurring in the northern part of the state. On average, about 75 percent of the annual precipitation in the state falls between November and March; with about 50 percent occurring between December and February. However, amounts of precipitation vary greatly from year to year, which can often make the services of surface water supplies undependable. The extreme northern part of California has slightly wetter summers than the rest of the state.

2.4.2.2. Runoff

Runoff is the amount of water left from precipitation that can be measured as stream flow after losses to evaporation, transpiration by plants, and the replenishment of storage within the aquifers. The areal distribution of runoff closely follows the areal distribution of precipitation. Runoff is greatest in the mountains (exceeding 40 inches per year in many areas), where most of the precipitation falls as snow that melts during the spring and runs off with minimal evapotranspiration. In contrast, the basins in the arid parts of southeastern California have virtually zero runoff because most precipitation is lost due to high rates of evaporation. However, high-intensity storms or rapid snowmelt in the mountains that border the basins may cause flash floods that reach the floors of the basins.

2.4.2.3. Water Surplus and Deficit

The relation between precipitation and evapotranspiration is a major factor in water availability. If annual precipitation exceeds annual potential evapotranspiration, then there is a net surplus of water and stream flow is perennial. Water is available to recharge aquifers only at times when precipitation or snowmelt is greater than actual evapotranspiration. However, annual potential evapotranspiration can exceed annual precipitation, which causes a net deficit of water. A net annual moisture deficit is present almost everywhere in California except the northern California coast (which receives considerable rainfall from winter storms) and the mountainous regions of northern and east-central California.

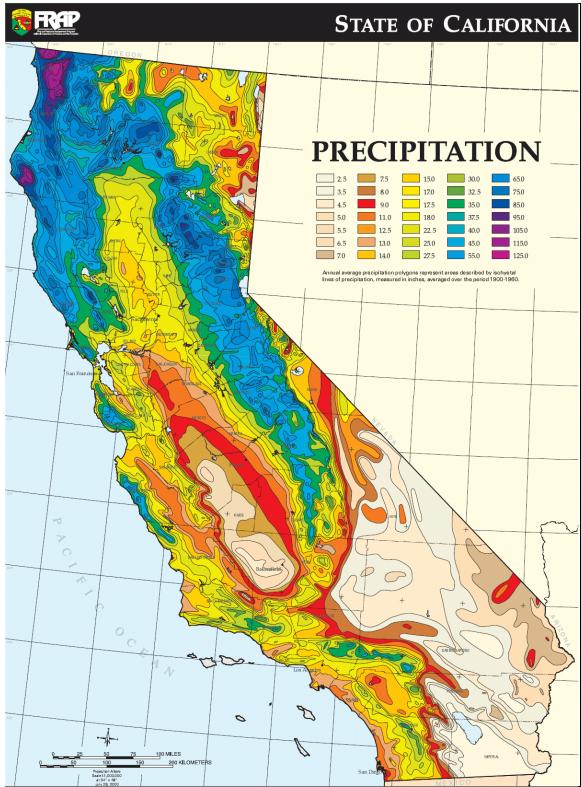


Figure 4—Annual Precipitation Rates in California (CDF, 2011)

In most of southern California, nearly all streams that arise in the mountains are ephemeral and lose flow to alluvial aquifers within a short distance of where the streams leave the mountains and emerge onto the valley floors.

2.4.3. Hydrologic Regions of California³

Hydrologists divide California into hydrologic regions (**Figure 5**). The Regional Water Boards are defined (for the most part) by the boundaries of these hydrologic regions, as described in CWC, section 13200. Hydrologic regions are further divided into hydrologic units, hydrologic areas, and hydrologic subareas.

2.4.3.1. North Lahontan Hydrologic Subregion

The North Lahontan Hydrologic Subregion consists of the western edge of the Great Basin, and water in the region that drains eastward toward Nevada. Groundwater in the northern half of this subregion is primarily contained in basin-fill and volcanic rock aquifers, with some fractured hard rock zones. The southern half of this region is dominated by fractured hard rock zones, but small segments of basin-fill aquifers also exist in this part of the subregion. In general, the water quality in the North Lahontan Hydrologic Subregion is good. In basins in the northern portion of the region, groundwater quality is widely variable. The groundwater quality along these basin margins tends to be of higher quality, but the potential for future groundwater pollution exists in urban and suburban areas where single-family septic systems have been installed, especially in hard rock areas. Groundwater quality in the alpine basins ranges from good to excellent.

2.4.3.2. South Lahontan Hydrologic Subregion

The South Lahontan Hydrologic Subregion is bounded on the west by the crest of the Sierra Nevada Mountains, on the north by the watershed divide between Mono Lake and East Walker River drainages, on the east by Nevada, and on the south by the crest of the San Gabriel and San Bernardino Mountains and the divide between watersheds draining south toward the Colorado River and those draining northward. The subregion includes all of Inyo County and parts of Mono, San Bernardino, Kern, and Los Angeles Counties.

The South Lahontan Hydrologic Subregion contains numerous basin-fill aquifers, separated by fractured hard rock zones. Although the quantity of surface water is limited in the South Lahontan Hydrologic Subregion, the quality is very good, being greatly influenced by snowmelt from the San Bernardino Mountains. However, at lower elevations, groundwater and surface water quality can be degraded, both naturally from geothermal activity and because of human-induced

³ Hydrologic region descriptions were adapted from: California's Groundwater, Bulletin 118, DWR 2020 and the Regional Water Board Basin Plans

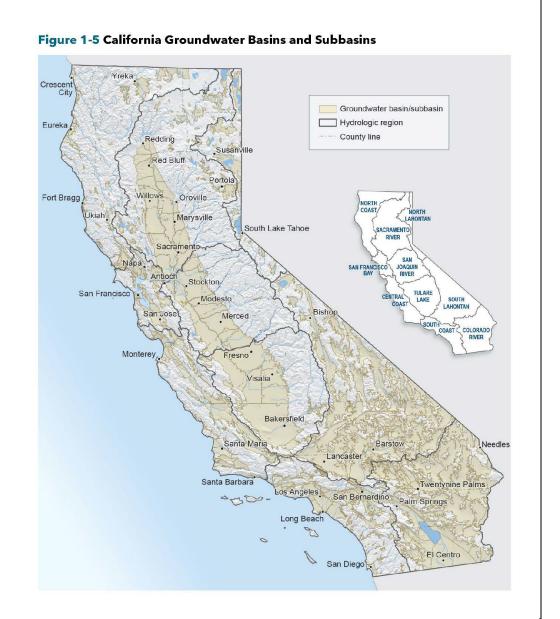


Figure 5—Hydrologic Regions and Groundwater in California (DWR 2003)

activities. Drinking water standards are most often exceeded for arsenic, boron, fluoride, hexavalent chromium and TDS concentrations. Groundwater near the edges of valleys generally contains lower TDS content than water beneath the central part of the valleys or near dry lakes.

2.5. Overview of CAFs and Project Description

The project regulates waste discharges from dairies and other cattle CAFs. As such, the project will likely induce the construction of waste management system facilities consisting of collection, transfer, storage, and disposal structures that

conform with the requirements of the General Order. Waste collection occurs at the nearest possible point to waste generation. Waste transfer represents locations and infrastructure intended to temporary house waste and transport waste to storage or disposal locations. Waste storage consists of locations where waste is stored long-term (months, seasonally, or up to a year) and isolated from groundwater. Waste disposal includes, as applicable, both offsite disposal and onsite agronomic use.

The following sections discuss the production areas at a CAF, the constituents of concern in cattle waste, the General Order requirements, and the monitoring and reporting program. The production areas represent the locations where waste is typically generated. The constituents of concern help identify the need for this project to regulate cattle waste at CAFs. Finally, the General Order requirements and monitoring and reporting program provide context how this project will be implemented to regulate cattle waste discharges.

2.5.1. Production Areas

The General Order requires the production areas such as milk barns, sprinkler pens, manure storage areas, and corrals to implement best management practices. For the confined animals that are not kept inside a roofed area, facilities are required to ensure storm water, wash water, and nutrients applied to irrigate croplands that grow feed for the animals, to have limited infiltration into the underlying soil materials. Generally, the General Order requires management of wash water, storm water, corrals, manure, and other organic materials at CAFs to prevent groundwater pollution and limit groundwater degradation.

2.5.1.1. Corral

Manure and stormwater can accumulate within corrals. The manure is often stacked and stored for drying (Photograph 1) and later offsite disposal to farmland. However, the manure, and any depressions made in high-traffic areas, can impound water, leading to infiltration of nitrogen and TDS (Photograph 2).

In addition to manure inside corrals, feed is placed and can accumulate adjacent to corrals. The cows are fed roughage (hay or silage) after each milking by placing the feed along an access route adjacent to the corral (Photograph 3). The dry feedstock can become windblown or, when saturated, leach nitrogen and TDS into soils.



Photograph 1—Manure scraped into piles for drying, intended for subsequent offsite disposal to farmland.



Photograph 2—Standing water after a rain event.



Photograph 3—Confined animal feed line between corrals. Cows are fed roughage (hay or silage) after each milking.



Photograph 4—Milk cow holding pen where wash water is generated.

2.5.1.2. Heifer Confinement

Individual pens, conceptually like corrals, are used for heifers (Photograph 5). This limits movement and can lead to concentrated manure and feedstock on the ground with varied infiltrative capacity. Manure can wash out of the pens, leading

to offsite infiltration. Additionally, dry feedstock can become windblown or, when saturated, leach nitrogen and TDS into soils.



Photograph 5—Heifer confinement with individual pens for calves (foreground). Livestock corrals and feeding rows (background).

2.5.1.3. Feed Storage

Feed storage can vary greatly between sites. The feed storage area may consist of any combination of pervious or impervious surface, walls, structural covering, (Photograph 6) or wrapped covering (e.g., plastic wrap). Feed may be stored wet or dry, and wet feed, including from stormwater, has the potential to leach nitrogen and TDS to soil unless otherwise captured.



Photograph 4—Animal feed storage area with grain, cake, and hay bales.

2.5.1.4. Waste and Stormwater Transfer, Treatment, and Storage

Manure and other wastewaters (e.g., wash water, stormwater after contact with wastes) can be collected and processed onsite. This may include transfer devices (e.g., wet wells with pumps), treatment (e.g., separators [Photograph 7], fertigation to cropland [Photograph 8]), and storage (e.g., impoundments).

Impoundments provide the biggest potential for untreated infiltration of wastes to soils and groundwater (Photograph 9). This is due to localized hydraulic head and less opportunity for near surface entrainment or phytoremediation of nitrogen or TDS. In fact, stormwater ponds may have a scarified bottom to promote percolation and typically are dry, resulting in no available plant life to uptake nitrogen (Photograph 10).



Photograph 5—Separator device to remove manure solids from dairy parlor wash water.



Photograph 8—Irrigated alfalfa forage field where solid and liquid waste are applied.



Photograph 9—Unlined disposal pond containing liquid and solid waste from dairy cow milk parlor wash water discharges.



Photograph 10—Unlined pond for storm water runoff from corral area.

2.5.2. Constituents of Concern

Constituents of concern in CAF wastewater include salt from cattle waste and feed additives (TDS), nutrients from cattle waste and fertilizers (nitrogen, phosphorus, etc.), bacteria from animals and animal waste (fecal coliforms, including Escherichia coli [E. coli]), other chemicals (pesticides, animal husbandry medical waste, etc.), and other waste materials (trash, animal mortalities, etc.).

These constituents, if not properly managed or treated, have the potential to degrade water quality. The Basin Plan has groundwater quality objectives for selected constituents, including TDS, nitrate, and total coliforms. These water quality objectives include primary and secondary maximum contaminant levels (MCLs and SMCLs, respectively) for nitrate and TDS.

| Constituent | Water Quality Objective |
|--|--------------------------|
| Nitrate as nitrogen (NO ₃ -N) | 10 mg/L (maximum) |
| TDS | 500 mg/L (recommended) |
| | 1000 mg/L (upper) |
| | 1500 mg/L (short-term) |
| Total coliforms | 1.1 MPN/100 mL (maximum) |

 Table 2: Relevant Constituents and Water Quality Objectives.

2.5.3. Order Requirements

A CAF is defined in the California Code of Regulations, (CCR), title 27, section 20164, as any place where cattle, sheep, swine, horses, mules, goats, or other domestic animals are corralled, penned, tethered, or otherwise enclosed or held and where feeding is by means other than grazing. The General Order requires Dischargers to manage waste to protect water quality and conduct monitoring and reporting of compliance actions.

New, expanding, or existing CAFs may be covered under the General Order. The Water Board may enroll a person discharging or proposing to discharge waste from a CAF under the General Order provided all the following criteria are met.

- a. Site Location: The facility is not located within an area prohibiting a discharge to land, per section 4.1 and section 5.2, Waste Discharge Prohibitions, of the *Water Quality Control Plan for the Lahontan Region* (Basin Plan).
- b. Operations and Capacity: The facility operates as a confined animal facility more than seasonally (more than three months per year).
- c. Waste Source: The waste originates from a facility housing cattle, such as dairy cows, heifers, or cattle for feeding or slaughter.

The General Order requires the implementation of best management practices in waste management and requires conservative design specifications. The General Order is intended to control COCs and protect groundwater from discharges from CAFs. This Order establishes requirements and standards that will result in the implementation of best practicable treatment and control measures.

The General Order requires new CAFs to be located outside the floodplain of any river or stream and, at minimum, be located 1,000 feet away from any rivers. As the Mojave River Valley groundwater basin is a source of drinking water for several cities and communities, the General Order prohibits new CAFs to develop within 1.5 miles to either side of the centerline of the Mojave River. The discharge of any waste – treated or untreated – to surface waters or surface water drainage courses is prohibited. In addition, the direct discharge of wash water into groundwater via backflow through water supply or irrigation supply wells is prohibited; the use of manure to construct impoundment structures or to repair, replace, improve, or raise existing impoundment structures is also prohibited.

Requirements in the General Order include:

<u>Production Areas:</u> Wash water must be collected and stored in lined impoundments, prior to use on cropland or proper disposal. The General Order also includes requirements associated with drainages, permeability of flooring in milk rooms, grading and compaction of certain surfaces that will result in the implementation of best practicable treatment and control (BPTC) measures associated with controlling impacts from manured areas.

Land Application Areas: The General Order limits the application of blended wash water mixed with groundwater to cropped area to a maximum TDS concentration of 1,000 milligram per liter (mg/L) or less. It also contains requirements for soil sampling below the crop roots at several depths for soil moisture content sampling and analysis of nitrate and TDS concentrations. This requirement is to ensure that overapplication of nutrients and salts does not occur and is protective of water quality. Additionally, the General Order requires submission and implementation of a Nutrient Management Plan which includes BMPs to maximize nutrient uptake by plants and minimize the passthrough and infiltration of nutrients and salts into the groundwater. To limit infiltration, application of manure and wastewater to disposal fields or crop lands must be at rates reasonable for the crop and location conditions. Dry manure must not be applied at a rate greater than 2.5 tons per acre per year, unless justified. Wastewater must not be applied to a land application area during periods when soil is saturated, within 24 hours of a forecasted precipitation event, or wind event, as specified in the General Order. Wastewater must be managed to minimize percolation to groundwater.

<u>Impoundment Liners:</u> Wastewater retention impoundments must meet a strict performance standard that must be in compliance with conservative design

standards. This Order requires submittal of workplans to bring any deficient impoundment into compliance. Within five years, dischargers must remove unlined wash water impoundments and replace them with lined impoundments.

CAFs may be required to install or construct additional features or upgrades to comply with the General Order. As stated in the Basin Plan, Chapter 4.10, **Error! Reference source not found.**, dischargers can utilize relevant NRCS Conservation Practice Standards, as further described in Finding 15.c, Table 2, as guidance for implementing water quality protection requirements.

2.5.4. Monitoring and Reporting

The General Order requires installation of several monitoring devices or methods to evaluate the impact of liquid and solid waste disposal, including the following.

- a. Installation of soil moisture sensors below the root zone of crops at several different depths where waste is discharged to irrigated land to monitor the over application of water and wash water.
- b. Soil sampling at and below the root zone to monitor changes in nitrate and TDS concentrations in shallow soil that will not be taken up in the root zone of crops.
- c. Installation of groundwater monitoring wells upgradient and downgradient of the CAFs to monitor changes in groundwater quality around the CAFs.

The General Order will require technical and monitoring reports necessary to verify that the CAFs are operated in accordance with the requirements of the order, and the beneficial uses of the groundwater are not adversely affected by discharges from a facility. The purpose of monitoring is to confirm that the discharges of waste are effectively controlled by management practices and to evaluate compliance with the General Order.

3. CEQA ENVIRONMENTAL CHECKLIST

The CEQA Checklist is a series of questions grouped by subject that identifies different types of potential environmental impacts that a project may cause. The checklist provides a standard evaluation tool to identify a proposed project's adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

CEQA considers what are the existing conditions of the physical project site as a baseline. It then compares how much change will occur to the site if the project is implemented. Based on the CEQA Guidelines, the impact severity is rated on a scale of four impact levels:

- Potentially significant impact
- Less than significant with mitigation incorporated
- Less than significant impact
- No impact

3.1. Aesthetics

Except as provided in PRC, section 21099, would the project:

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|------------------------------------|--|
| A | Have a substantial adverse effect on a scenic vista? | Less Than Significant Impact | Siting criteria of the local authority will continue to establish appropriate locations for new structures or modifications to existing structures on a site-specific basis, accounting for scenic vistas. Many local agencies have ordinances in place establishing standards for construction within scenic areas and established local land use and zoning requirements (specifically agricultural zoning). The General Order will not affect those requirements. The potential impacts of the General Order on scenic vistas are considered less than significant. |
| В | Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | Less Than Significant Impact | See response to preceding item (Section 3.1 A). There are currently approximately 400 miles of state designated scenic highway resources in the Lahontan Region. Although the waste management system facilities associated with the General Order could be constructed within the view shed of scenic highways; federal, state, and local regulations would prohibit these facilities from being constructed within highway rights-of- way. Because above ground portions of these facilities would be relatively low-profile and would be located outside of highway rights-of-way, impacts to scenic highways would be less than significant. The nature of these facilities would also preclude construction in or on historic buildings and rock outcroppings. |

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|--|
| C | In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | Less Than Significant Impact | See response to preceding item (Section 3.1 A). Activities related to this project will only occur in areas zoned for such by local jurisdictions. This will likely be limited to non-urbanized areas as urban areas typically do not allow livestock or spreading of waste to cropland. As noted in the preceding responses, siting criteria of the local authority will continue to establish appropriate locations for new structures or modifications to existing structures on a site-specific basis. Additionally, the low-lying nature of buildings typically associated with CAFs waste management systems should not obstruct scenic views (e.g., mountains) found near CAFs. |
| D | Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | Less Than Significant Impact | Permanent, independent sources of external lighting are not a typical feature for CAFs. If security lighting is needed, it can be shielded to prevent substantial light or glare. Security lighting, if used, would typically be required by the local land-use authority. This issue would be addressed during the site-specific evaluation of individual projects by the local authority. |

3.2. Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the

forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|--------------|--|
| A | Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use? | No Impact | Siting criteria of the local authority will continue to establish appropriate locations for new structures or modifications to existing structures on a site-specific basis. Additionally, the waste management systems for CAFs support an agricultural activity and would not require the conversion of agricultural land to alternative zoning. |
| B | Conflict with existing zoning for agricultural use, or a Williamson Act contract? | No Impact | Waste management systems for CAFs, especially disposal as fertigation, are an agricultural activity and would not conflict with agricultural zoning requirements. Additionally, the adoption and implementation of the General Order will not affect zoning designations, or a Williamson Act contract established by local land use jurisdictions. Construction of CAFs will occur within land zoned for agriculture and land with existing Williamson Act contracts. The General Order does not affect zoning or Williamson Act contracts. Such conflicts would require zoning modifications, additional entitlements, and/or changes in Williamson Act contracts. This would then require separate discretionary action by local land use authorities and would require the preparation of site- specific environmental documents that analyze these impacts. |

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|--|
| С | Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC, section 12220[g]), timberland (as defined by PRC, section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g])? | No Impact | No existing waste management systems, or CAFs producing waste to manage, affect forest land or timberland. Such facilities are located primarily in unforested valleys, near crop or pasture lands. It is not likely that new facilities would affect either forest land or timberland. Furthermore, the adoption and implementation of the General Order will not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. Any conflicts with or conversion of existing zoning would require site-specific project approvals by local land use authorities. |
| D | Result in the loss of forest land or conversion of forest land to non-forest use? | No Impact | See response to preceding item (Section 3.2 C). No existing facilities affect forest land or timberland. Such facilities are located primarily in unforested valleys. It is not likely that new facilities would affect either forest land or timberland. |
| E | Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non- agricultural use or conversion of forest land to non-forest use? | Less Than Significant Impact | See response to preceding items (Section 3.2 A, B, C, and D). The General Order regulates the discharge from already occurring agricultural activities. The General Order imposes regulatory requirements on existing activities; it does not exclusively create a vehicle for activities resulting in the conversion of farmland or forest land. |

3.3. Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|--|
| A | Conflict with or obstruct implementation of the applicable air quality plan? | Less Than Significant Impact | A project would conflict with or obstruct implementation of the regional air quality plans if it would be inconsistent with the growth assumptions, in terms of population, employment or regional growth in vehicle miles traveled. The growth assumptions used for the regional air quality plans are based upon the growth assumptions provided in local general plans. The implementation of management practices and facility upgrades as a result of the General Order would have a less than significant impact on any of the growth assumptions made in the preparation of the clean air plans (no new housing is proposed as part of this permit) and would not obstruct implementation of any of the proposed control measures contained in these plans. |
| | | | Implementation of water quality plans and associated actions, as required by the General Order, would not result in new land uses that would generate a significant increase in traffic or other operational air emissions. |
| | | | Most wastewater management practices at CAFs rely on gravity. Some components (e.g., pumps) may rely on electricity and other activities (e.g., hauling manure) may rely on machinery. The use of combustion equipment, such as generators, is short-term. The additional air quality impacts caused by combustion would |

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|---|
| A | | | be negligible, and the overall air quality impacts would be analyzed by the local land use authority permitting agency. The adoption of the General Order will not supersede or alter any existing regulations or requirements of other agencies. |
| | | | Temporary increases in traffic could occur at CAFs during construction and installation of BMPs to comply with the requirements of the General Order. However, these impacts are expected to be limited in numbers and types of vehicles used, miles driven, duration, and air resultant emissions. Additionally, the use of equipment for moving waste is negligible compared to overall site operations. |
| | | | Properly maintained waste management systems are unlikely to conflict with or obstruct implementation of the applicable air quality plan and the project is expected to have a less than significant impact on air quality. |
| B | Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | Less than Significant Impact | Compliance with the provisions of the General Order may, in certain circumstances, require the preparation and implementation of plans and practices to control and reduce sediment, pathogens, and nutrient discharges to surface and groundwater. As such, some engine emissions from the temporary operation of construction vehicles and equipment used to comply with the provisions of the General Order would be both short-term and localized and will not violate any air quality standard or contribute substantially to an existing or projected air quality violation. |

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|------------------------------------|---|
| С | Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality? | Less Than Significant Impact | The existing facilities have not violated any air quality standards in the region. It is not likely that new facilities will violate any air quality standards. Existing or new CAFs do not individually have significant operational air quality impacts. Cumulatively, a considerable net increase is not expected, as there the number of CAFs in the Lahontan Region is not expected to increase significantly, and any air quality impacts as a result of the General Order are not expected to contribute significantly. See response to preceding items (Section 3.3 A and B). |
| D | Expose sensitive receptors to substantial pollutant concentrations? | Less Than Significant Impact | The existing facilities have not caused any significant additional pollution concentration to the environment. It is not likely that new facilities will cause any significant pollution concentration to the environment or sensitive receptors. Existing or new CAFs do not individually have significant operational air quality impacts. See response to preceding items (Section 3.3 A and B). |
| E | Create objectionable odors affecting a substantial number of people? | Less Than Significant | Generally, CAFs are permitted in areas that are not very populated and where land price is not prohibitive. The existing waste management facilities will not cause any additional odors that will affect beyond what is already there. New facilities would be in an agricultural-zoned area and will be permitted by local agencies. The General Order specifically requires that the Discharger must implement appropriate BMPs in the collection, treatment, storage, discharge of waste or waste disposal systems at a CAF to |

| No. | Potential Impact | Impact Level | Discussion |
|-----|------------------|--------------|--|
| E | | | prevent creation of a condition of odors, pollution, or nuisance and will ensure less than significant impact. |

3.4. Biological Resources

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|--------------------------|--|
| A | Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | Less Than Significant | Discharges to surface waters and wetlands is prohibited by the General Order; the discharges covered under the General Order are unlikely to affect a candidate, sensitive, or special status species. The potential for a CAF to impact any species identified as a candidate, sensitive, or special status species is low because CAFS are likely to be located in areas already modified for agricultural use. New or expanding CAFS that are constructing buildings or controls on a new site would need permits from county or city agencies that require inspections to avoid impacts to candidate, sensitive, or special status species. As individual waste management facilities are proposed for construction, siting would be evaluated by local land use authorities. Most local authorities siting criteria includes protection of environmentally sensitive areas and this includes proximity to habitats of threatened and endangered species. Adoption of the General Order will not have a significant impact on any candidate, sensitive, or special status species. |

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|------------------------------------|---|
| B | Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? | Less Than Significant Impact | See response to preceding item (Section 3.4 A). Additionally, the General Order has floodplain and river setback criteria. CAF operation areas such as corrals, animal housing, outdoor access areas, ponds, storm water ponds, etc.; must be sited and/or designed to prevent flood waters from the 100-year flood (annual one percent probability) event or stormwater runoff from the 100-year storm event from inundating the operation areas. Additionally, any new CAF is not permitted to discharge within 1.5 miles of the Mojave River or within 1000 feet of any other surface water body and is not allowed within the 100- year floodplain of any river or stream. |
| С | Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | Less Than Significant Impact | See response to preceding item (Section 3.4 B). Because the discharge is limited to land, projects are unlikely to impact federally protected wetlands. With adoption of the General Order, the Lahontan Water Board will not issue any permit to CAF waste management facilities within the 100-year floodplain of any stream. |

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|--|
| D | Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | Less Than Significant Impact | See response to preceding item (Section 3.4 A, B, & C). Dischargers to surface water are prohibited under the General Order so there is no possibility of interfering with the movement of fish. Wildlife species with established native resident or migratory wildlife corridors or wildlife nursery sites are unlikely to be impacted by the General Order, as any expansion or new construction or operation will likely be in individual structures in rural areas where movement of species would still be possible. Adoption of the General Order will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with the established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. |
| E | Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | Less Than Significant Impact | Adoption and implementation of the General Order will have no impact on local policies or ordinances protecting biological resources. If there is any conflict with local policy or ordinances, it will be minimal due to the nature of the activity and the size of CAFs located in the Lahontan Region. |
| F | Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | Less Than Significant Impact | Adoption and implementation of the General Order will have no impact on an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. See preceding responses (Section 3.4 A, B, C, & D). |

3.5. Cultural Resources

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|--|
| A | Cause a substantial adverse change in the significance of a historical resource as defined in section15064.5? | Less Than Significant Impact | Construction of a waste management system at a new or existing CAF may involve grading, repair, and construction or reconstruction. These activities would generally be limited to excavation/grading for road repair/rehabilitation, installation of fence posts, monitoring wells, grading of impoundments, etc. In most cases, this construction would occur in areas already disturbed by recent human activity, not at or in areas containing "historical resources" as defined in section 15064.5 |
| В | Cause a substantial adverse change in the significance of an archaeological resource pursuant to section15064.5? | Less Than Significant Impact | Implementation of the General Order for existing could involve minor grading, repair, and reconstruction. This activity would generally be small in scale, and would be limited to shallow excavation/grading for minor road repair/rehabilitation, and the installation of fence posts, etc. Significant paleontological resources are typically found in rock layers or in Pleistocene age alluvium. Dairy operations would be restricted to surface and near surface alteration of soils that have low impacts to unique paleontological resources or sites or unique geological features at existing dairy operations. Implementation of the GWDR for new, expanding, or the reopening of inactive dairies could involve grading, repair, and reconstruction. See response to preceding item (Section 3.5 A) |

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|--------------------------|---|
| В | | | paleontological potential. Therefore, the project would have less than significant |
| C | Disturb any human remains, including those interred outside of dedicated cemeteries? | Less Than Significant | Specific sites seeking coverage under the General Order may have the potential to encounter human remains during construction activities. Upon discovery of human remains, project proponents will need to comply with Health and Safety Code, section 7050.5 and PRC, section 5097.98. The following actions will be taken immediately upon the discovery of human remains. Work in vicinity of the discovery will stop immediately and the county coroner will immediately be notified. The coroner has two working days to examine human remains after being notified by the responsible person. If the remains are Native American, the coroner has 24-hours to notify the Native American Heritage Commission. The Native American Heritage Commission will immediately notify the person it believes to be the most likely descendent of the deceased Native American. The most likely descendent has 48-hours of being granted access to the site to make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and any associated grave goods. |

3.6. Energy

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|--|
| A | Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | Less Than Significant Impact | Adoption and implementation of the General Order will not affect energy consumption. Construction of CAF waste management systems involve the use of heavy equipment for hauling, excavation, etc., that requires negligible energy. Local land ordinances require construction during daylight hours, limiting any energy consumption specific to illuminating project construction area. |
| | | | The construction phase is of limited duration and a small footprint; therefore, it would not create a significant impact on the environment. Additionally, most facilities that are anticipated to be regulated under this General Order have already been constructed and/or would otherwise be constructed. |
| В | Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | Less Than Significant Impact | See response to preceding item (Section 3.6 A). Adoption and implementation of the General Order will not supersede or alter any state or local plans or ordinances. Adoption of the General Order will not conflict or obstruct any state or local plans for energy efficiency. |

3.7. Geology and Soils

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|------------------------------------|---|
| A | Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving rupture of known earthquake fault, as delineated on the most recent Alquist- Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | Less Than Significant Impact | Strong seismic shaking, ground failure (including liquefaction), and landslides are large-scale dynamic Earth processes that are not significantly impacted by the surficial nature of CAF activities. The activities conducted under the General Order will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, or seismic related ground failure, including liquefaction. Additionally, the activities covered under the GWDR will not expose people or structures to potential substantial adverse effects involving landslides, because existing and inactive dairies will either utilize existing stable structures or reconstruct buildings in the existing footprint. Construction at new, existing, expanding, or inactive dairy sites would require county permits, certifications, and inspections. The siting criteria of the local agencies will establish appropriate locations and seek to avoid or minimize, on a site-specific basis, any potential for risk to people or structures. Therefore, substantial adverse effects including risk of loss, injury, or death are unlikely. |

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|--|
| В | Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving strong seismic ground shaking? | Less Than Significant Impact | See response to preceding item (Section 3.7 A). |
| С | Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction? | Less Than Significant Impact | See response to preceding item (Section 3.7 A). Additionally, CAF waste management systems are unlikely to be built on sites prone to failure from liquefaction or impound enough liquids to cause liquefaction due to oversaturation. |
| D | Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving landslides? | Less Than Significant Impact | See response to preceding item (Section 3.7 A). Additionally, CAF waste management systems are unlikely to be built on sites prone to failure from liquefaction or impound enough liquids to cause liquefaction due to oversaturation. |
| E | Result in substantial soil erosion or the loss of topsoil? | Less Than Significant Impact | The General Order requires erosion controls be implemented to ensure that small coves and irregularities are not created around the waste management sites or perimeter of the impoundments. Separately, new waste collection construction may create the potential for erosion. However, one of the objectives of the General Order is to reduce erosion, not increase it. Small grading projects that would generally apply to routine maintenance would be subject to non-discretionary requirements of local agency grading ordinances. The General Order requirement for plans, |

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|---|
| Е | | | monitoring and report of Management Practices, ensure soil conservation. |
| | | | In most cases, waste management systems should help with soil stabilization (e.g., fertigating crops, enhancing mineralized soils with organics). Therefore, the Regional Water Board finds the impacts will be less than significant. |
| F | Be located on a geologic unit or soil that is unstable, or that would become unstable | Less Than Significant Impact | See discussion for preceding items (Section 3.7 A, B, C, D, and E). Compliant CAFs would be designed to |
| | as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | | increase stability, both onsite and offsite, to reduce erosion and sedimentation. Grading would be done to minimize any potential for landslide, lateral spreading, subsidence, liquefaction, or collapse. |
| G | Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | Less Than Significant Impact | Most new or expanding projects will have a project engineer/geologist for geotechnical investigations where applicable and soils must be adequate to support any wastewater construction. Based on the structures that are typical waste collection and discharge, substantial adverse effects related to soils; including risk of loss, injury, or death; are unlikely. |

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|--|
| Н | Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | Less Than Significant Impact | Waste management at CAFs will not involve subsurface waste disposal, including by septic tank, and does not typically go into sewers. Generally, the liquid wastes will be used as surface fertilizer or impounded until evaporated. Only vadose zone soils supporting cropland should be affected. These soils will be capable of supporting disposal of wastewater (mixed with fresh water, if needed), provided it is applied at an agronomic rate. |
| I | Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | Less Than Significant Impact | Construction of waste management- related structures at new or existing CAFs may involve grading, repair, and construction or reconstruction. These activities would generally be limited to excavation/grading for road repair/rehabilitation, installation of fence posts, monitoring well installation, grading of impoundments, etc. In most cases, this construction would occur in areas already disturbed by recent human activity, not at or in areas containing historical or paleontological resources (see response Section 3.5 B). |

3.8. Greenhouse Gas Emissions

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|--|
| A | Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | Less Than Significant Impact | Construction of a waste management system involves the use of heavy equipment for hauling, excavation, etc. However, the construction phase is of limited duration and would typically require few construction vehicles at any given time; therefore, it would not create a significant impact on the environment. |

| No. | Potential Impact | Impact Level | Discussion |
|-----|------------------|--------------|---|
| | | | Operation of the waste system may result in generation of some greenhouse gas (GHG) emissions. The primary gasses of concern produced are carbon dioxide (CO2) and methane (CH4). Minimal amounts of hydrogen sulfide (H2S) may be generated in impoundment structures. The amount of gas produced varies depending upon treatment technology, operation and maintenance practices, and the disposal of residual waste material. Regardless, properly maintained waste management systems should not create any more GHGs than the waste would otherwise cause through unregulated discharge. |
| | | | Operation of any pumps and mechanical aerators will likely use electricity. Because operators pay for electricity based on usage, they are incentivized to employ efficient practices wherever possible. |
| | | | Currently, most air basins in California are in non-attainment for ozone (i.e., the standard was violated recently), and only a small portion of the Mojave Desert Air Basin (in San Bernardino County) is in non-attainment for H2S emissions (California Air Resources Board [CARB], 2012). Although CH4 is acknowledged to be a GHG and a significant contributor to climate change, it is not a criteria pollutant regulated by air basins in California. |
| | | | Although waste systems contribute a small amount of GHGs, the General Order will not affect the number of systems, or the volume of wastewater discharged to the systems. Many of these systems already exist in some capacity and new systems at existing or |

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|------------------------------------|---|
| | | | new facilities will be small in scope and by nature, have minimal emissions. The proposed General Order will not contribute to cumulative air quality impacts, and onsite discharge using best practices is anticipated to create less impact than unregulated discharge or hauling waste. Other sources of air emissions, such as transportation, industrial activities, and power generation, are the major contributors to significant cumulative air quality impacts. |
| B | Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | Less Than Significant Impact | The proposed project would not affect applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses. In September 2006, Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. |
| | | | To effectively implement the cap, AB 32 directs the California Air Resources Board (CARB) to develop and implement regulations to reduce statewide GHG emissions from stationary sources. See also discussion in Air Quality Impacts section 3.3. |

3.9. Hazards and Hazardous Materials

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|------------------------------------|---|
| A | Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | Less Than Significant Impact | CAF waste management systems will likely not store hazardous materials. In most cases, only common household- grade chemical disinfectants or similarly potentially hazardous chemicals are used at CAFs. Milking lines are daily cleaned and disinfected between milking events. At most, additives are used in impounded manure waste to accelerate natural decomposition processes. |
| | | | When hazardous materials may be used, local authorities may limit the volume and means of on-site storage for such chemicals through the provisions of California Building Code. Hazardous materials are defined and regulated under several federal and state statutes and associated regulations. The General Order does not change any regulations pertaining to hazardous materials. However, CCR, title 27, Section 20090(b) wastewater also applies to the General Order, and so does not allow for hazardous waste discharge. Since no discharge of hazardous waste is authorized under this General Order, any impacts are expected to be less than significant. |
| В | Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | Less Than Significant Impact | See discussion for preceding item (Section 3.9 A). |

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|---|
| С | Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | Less Than Significant Impact | See discussion for preceding item (Section 3.9 A). |
| D | Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | Less Than Significant Impact | See discussion for preceding item (Section 3.9 A). |
| E | For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | Less Than Significant Impact | The General Order would not add population or housing to areas. CAFs waste management systems may be in the vicinity of an airport or airstrip, but they would not add substantial numbers of employees or any residents to these areas. Because of the typically submerged nature of waste pumps or other mechanical components, minimal noise would be generated. The General Order would not otherwise create safety hazards or excessive noise within the vicinity of an airport or airstrip. |
| F | Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | Less Than Significant Impact | See discussion for preceding item (Section 3.9 E). |

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|---|
| G | Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | Less Than Significant Impact | The General Order would not add population or housing to wildland areas nor would waste management systems required by the General Order create any new significant fire risk within wildland areas. |

3.10. Hydrology and Water Quality

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|---|
| A | Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | Less Than Significant Impact | Adoption of the General Order will not violate any water quality standards in the Water Quality Control Plan (Basin Plan, Chapter 2, Beneficial Uses for Groundwaters of the Lahontan Region, Table 2-2 and Chapter 3, Water Quality Objectives for certain Water Bodies, Mojave Hydrologic Unit, Table 3-20) or WDRs. The General Order will be implemented by the Lahontan Water Board and compliance with the Basin Plan is required. The General Order requires a Discharger seeking enrollment and owner/operators to develop site-specific management plans applicable to each operation. Such plans include waste management plans for proper management and disposal of solid and liquid waste generated in CAFs production areas and for agronomic onsite disposal of solid and liquid waste to lands or proper offsite disposal to prevent groundwater pollution and minimize degradation. |

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|---|
| | | | The General Order prohibits the discharge to cause or contribute to exceedances of groundwater limitations that are based on water quality objectives contained in Chapter 3 of the Basin Plan. These water quality objectives are intended to ensure beneficial uses of the groundwaters are maintained as described in Chapter 2 of the Basin Plan. |
| | | | Occasional WDR violations or accidental discharges could occur if the waste management systems do not function properly, but monitoring provisions imposed by the Lahontan Water Board would require the Discharger to identify such circumstances and take corrective actions. The Lahontan Water Board also has the authority to issue orders to cleanup or abate conditions of pollution or nuisance resulting from unintentional or unauthorized releases of waste or pollutants to the environment. |
| | | | Finally, if the proposed discharges cannot conform with the requirements of the General Order, the Lahontan Water Board can issue individual WDRs that require the site be operated such that water quality is protected, in accordance with the Basin Plan and CWC. |
| В | Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater | Less Than Significant Impact | The General Order does not directly authorize the construction of new production wells and is not anticipated to impact the usage of groundwater. Despite probable incorporation of liquid waste into fertigation practices, the waste management process should not substantially increase water usage. Instead, the reuse of liquid waste may |

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|------------------------------------|--|
| | management of the basin? | | reduce the reliance on addition groundwater for irrigation purposes and implementation of best management practices for wash water at dairies may reduce overall water usage. |
| | | | Groundwater supply wells and monitoring wells placement, installation and construction are permitted and regulated by the local agencies. Well applications are routinely reviewed for setback distances, construction details, and proposed uses. CAFs, including waste management systems, may be subject to groundwater adjudication requirements depending upon where they are located and when they began operations. Given these required local agency approvals, the project would not interfere with local groundwater recharge and supply. In addition to the Lahontan Water Board authority, some CAFs may be subject to groundwater pumping restrictions in the adjudicated groundwater basins that are overseen be independent watermasters. |
| С | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in a substantial erosion or siltation on or off site? | Less Than Significant Impact | The General Order prohibits construction CAF operation (aka production) areas within the 100-year floodplain of any major streams or rivers. However, construction of a new waste management structure may require diversion of a ditch away from corrals or waste storage areas. CAFs must comply with standard permit conditions in the U.S. Army Corps of Engineers' Nationwide Permit Nos. 13 (Bank Stabilization) and 27 (Stream and Wetland Restoration Activities). U.S. Army Corps of Engineers' final approval and issuance of a permit is only valid |

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|---|
| | | | with Clean Water Act 401 certification of the proposed activity, which is issued by the Lahontan Water Board. Section 401 requires the Lahontan Water Board to certify that such projects comply with water quality standards, and as such Section 401 certifications often include conditions that are more stringent than the federal requirements. |
| D | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite? | Less Than Significant Impact | See discussion for preceding item (Section 3.10 C). Additionally, the General Order will require runoff controls from production areas. These runoff controls will inherently reduce the rate and amount of surface runoff on and off site. Clean stormwater will typically be attenuated and percolated; contaminated stormwater will be captured and stored for disposal as wastewater. |
| E | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial | Less Than Significant Impact | See discussion for preceding items (Section 3.10 C and D). |

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|--------------|---|
| | additional sources of polluted runoff? | | |
| F | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows? | No Impact | Waste management systems covered by the General Order are not allowed to be constructed in the 100-year floodplain. Therefore, any new structures related to the General Order will not impede or redirect flood flows within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary Map, Flood Insurance Rate Map, or other flood hazard delineation map. |
| G | In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | No Impact | The General Order will prohibit construction of a new CAF or expansion of an existing CAF within a 100-year floodplain of any stream or river. Therefore, there will be no risk of loss, injury, or death in the event of flooding. Thus, there is no impact. |
| н | Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | No Impact | See discussion for preceding item (Section 3.10 A&B). |

3.11. Land Use and Planning

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|--------------|--|
| A | Physically divide an established community? | No Impact | The General Order addresses wastewater collection, treatment, storage, and disposal on a site, not creating an offsite separation. Furthermore, the General Order is unlikely to conflict with another agency's plan and does not address zoning or land use designations. Therefore, the |

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|--|
| | | | project is not expected to physically divide an established community. |
| B | Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | Less Than Significant Impact | Adoption of the General Order is not expected to conflict with any applicable land use plan, policy, or regulation. The General Order is consistent with policies of the State Water Board and Regional Water Boards. The General Order is unlikely to conflict with another agency's plan as it does not alter or supersede any other agencies authority, nor does it not address zoning or land use designations. Such changes would require entitlements from local land use authorities. |

3.12. Mineral Resources

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|--|
| A | Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state? | Less Than Significant Impact | The construction of new waste management systems for CAFs should not impact the availability of any known mineral resources. Currently constructed CAFs are not located on any known mineral resources. New CAFs, and the associated waste system, are unlikely to be constructed in such a way to preclude access to a mineral resource due to financial bias toward the more valuable (mineral extraction) use of land resources. |
| В | Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | Less Than Significant Impact | See discussion for preceding item (Section 3.12 A). Furthermore, the General Order is unlikely to conflict with another agency's plan and does not address zoning or land use designations. |

3.13. Noise

Would the project result in:

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|------------------------------------|---|
| A | Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | Less Than Significant Impact | Construction activities associated with building a waste management system will generate noise consistent with the activity. Material delivery and/or earth moving equipment typically involves diesel engines. However, the noise is generally limited to daylight hours. The duration of construction activity varies with the size of the system, from weeks to months with periodic maintenance. CAF-related waste systems are not typically significant noise-producing facilities. Pond treatment systems may employ pumps and mechanical aerators which may run many hours of the day and/or night at certain times of the year. However, pond treatment systems typically occupy a large footprint so that noise is generally not a factor at or beyond the facility boundary. CAFs are in agriculturally zoned areas. Such areas are typically sparsely populated. In the rare case of an urban- located CAF, the California Noise Control Act gives individual cities the |
| | | | Control Act gives individual cities the power to set strict rules for noise reduction and enforce them as necessary. Each community sets its own ordinances so any facility located in a city limit will be subject to any noise ordinances enforced by the city. |
| В | Generate excessive ground borne vibration or ground borne noise levels? | Less Than Significant Impact | See discussion for preceding item (Section 3.13 A). |

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|------------------------------------|---|
| С | For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | Less Than Significant Impact | The General Order would not add population or housing to areas. CAFs waste management systems may be in the vicinity of an airport or airstrip, but they would not add substantial numbers of employees or any residents to these areas. Because of the typically submerged nature of waste pumps or other mechanical components, minimal noise would be generated. The General Order would not otherwise create excessive noise within the vicinity of an airport or airstrip. |

3.14. Population and Housing

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|------------------------------------|--|
| A | Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | Less Than Significant Impact | The General Order will not alter the number of CAFs that would be constructed in the future; therefore, the General Order is unlikely to induce substantial unplanned population growth in an area. The General Order does not change zoning or land use designation which would be required prior to the addition of homes, businesses, roads, and infrastructure. Such changes would require entitlements from local land use authorities. |
| В | Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | Less Than Significant Impact | The General Order does not allow the creation of new CAFs that would otherwise not be constructed. However, the limited space needed for the collection systems and relatively low value discharge to land compared to use of the land for domiciles makes displacement of housing very unlikely. |

3.15. Public Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

| No. | Potential Impact | Impact Level | Discussion |
|-----|--------------------|------------------------------------|--|
| A | Fire protection? | Less Than Significant Impact | Waste management systems will not require additional public services such as fire protection. New or expanding wastewater systems would not result in substantial adverse physical impacts associated with provisions of or need for new or physically altered governmental facilities. Such systems would be constructed in existing or planned and permitted communities. |
| В | Police protection? | Less Than Significant Impact | Waste management systems will not require additional public services such as police protection. New or expanding wastewater systems would not result in substantial adverse physical impacts associated with provisions of or need for new or physically altered governmental facilities. Such systems would be constructed in existing or planned and permitted communities. |
| С | Schools? | Less Than Significant Impact | Waste management systems will not require additional public services such as schools. New or expanding wastewater systems would not result in substantial adverse physical impacts associated with provisions of or need for new or physically altered governmental facilities. Such systems would be constructed in existing or planned and permitted communities. |
| D | Parks? | Less Than Significant Impact | Waste management systems will not require additional public services such as parks. New or expanding wastewater |

| No. | Potential Impact | Impact Level | Discussion |
|-----|--------------------------|------------------------------------|---|
| | | | systems would not result in substantial adverse physical impacts associated with provisions of or need for new or physically altered governmental facilities. Such systems would be constructed in existing or planned and permitted communities. |
| E | Other public facilities? | Less Than Significant Impact | Adoption and implementation of the General Order will not require additional public services for other public facilities. New or expanding waste management systems would not result in substantial adverse physical impacts associated with provisions of or need for new or physically altered governmental facilities. Such systems would be constructed in existing or planned and permitted communities. |

3.16. Recreation

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|------------------------------------|--|
| A | Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | Less Than Significant Impact | The General Order is not expected to impact the use of existing neighborhood and regional parks or other recreational facilities. Any population growth due to groundwater quality protection or jobs related to the waste system at a CAF will be negligible in terms of available recreational resources. |
| В | Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an | Less Than Significant Impact | See discussion for preceding item (A). |

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|--------------|------------|
| | adverse physical effect on the environment? | | |

3.17. Transportation

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|------------------------------------|--|
| A | Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? | Less Than Significant Impact | The implementation of the General Order will not conflict with an applicable plan, ordinance, or policy related to transportation. Construction of new or expanding waste systems will have a negligible impact on traffic (mobilization of earth-moving equipment and materials to and from the sites). Long term operation of a CAF waste system is not a significant trip generating activity; most waste is transported by pipe or channel. Additionally, adoption of the General Order is not expected to conflict with a transportation related ordinance. |
| В | Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | Less Than Significant Impact | See discussion for preceding item (Section 3.17 A). |
| С | Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | Less Than Significant Impact | See discussion for preceding item (Section 3.17 A). |
| D | Result in inadequate emergency access? | Less Than Significant Impact | See discussion for preceding item (Section 3.17 A). |

3.18. Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|------------------------------------|---|
| A | Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | Less Than Significant Impact | See response from Section 3.5, Cultural Resources discussion items. The proposed project will not promote significant additional construction and any land disturbance would be minimal based on the size of the waste management system. |
| B | A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | Less Than Significant Impact | See response from Section 3.5, Cultural Resources discussion items. |

3.19. Utilities and Service Systems

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|------------------------------------|---|
| A | Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | Less Than Significant Impact | The General Order regulates waste management systems associated with CAFs. Because these are not large, standalone facilities, it is not expected that relocation, construction, or relocation of any natural gas, electric power, or telecommunication facilities. Dischargers seeking coverage under the General Order may be required to make improvements in treatment, storage, or disposal capacity of their waste systems. Those requirements may result in new or expanded infrastructure being constructed. Any new infrastructure is unlikely to significantly affect the environment in relation to the CAF due to the relatively small footprint compared to existing operational activities. |
| В | Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | Less Than Significant Impact | The General Order, as a waste management regulation tool, will not require new or expanded water supply entitlements. Construction of new or expanding waste systems may require some water supplies to accommodate the construction processes and during startup. However, the General Order will not change the water supply needs or require new or expanded entitlements. |
| С | Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's | Less Than Significant Impact | The General Order's purpose is to treat CAF wastes on-site. This will not directly impact existing or planned wastewater treatment plants. However, there may be nearly de minimis impacts from domestic waste collection during construction activities related the waste management system. Therefore, |

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|---|
| | projected demand in addition to the provider's existing commitments? | | wastewater treatment provider capacity will not be appreciably affected. |
| D | Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | Less Than Significant Impact | The General Order would not require ongoing disposal of solid waste in a landfill. Some solid waste may be generated and disposed of during construction activities. Ongoing solid waste, such as solid waste manure from any treatment process, will be properly disposed to land as fertilizer to grow crops at agricultural sites or may be disposed of offsite but not in excess of state or local standards or infrastructure capacity. |
| E | Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | Less Than Significant Impact | The General Order requires dischargers to comply with federal, state, and local statutes and regulations related to solid waste. |

3.20. Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

| No. | Potential Impact | Impact Level | Discussion |
|-----|---|------------------------------------|--|
| A | Substantially impair an adopted emergency response plan or emergency evacuation plan? | No impact | The General Order does not supersede or alter any existing emergency response or evacuation plans. |
| В | Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project | Less Than Significant Impact | Due to the agricultural nature of the waste management systems that will be regulated under the General Order, it is not expected that the approval and implementation of the General Order will highly affect occupancy rates or |

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|------------------------------------|--|
| | occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | | wildfire risks. The construction and/or operation of the facility will not heighten any risk of wildfire or the spread of wildfire as activities are not expected to propagate fire. |
| С | Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | Less Than Significant Impact | The General Order will regulate small waste management systems that will require minimal additional infrastructure beyond what has already been permitted by the local land use agency. Any construction activities will be subject to associated construction permits both at the local and state level. |
| D | Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | Less Than Significant Impact | CAF waste management systems that can be covered under the General Order typically contain the stormwater that falls on the facility footprint. General Order will require storm runoff from waste generated areas be stored at the facility, discharge of polluted runoff is unlikely to occur. The General Order also requires that all pond systems shall have an erosion control program implemented to ensure that small coves and irregularities are not created around the perimeter of the water surface. The General Order prohibits sites from being developed on steep slopes or drainages that would become unstable after fire incidents. |

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|------------------------------------|--|
| A | Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | Less Than Significant Impact | The General Order only addresses management of CAF wastes to land using best management practices, such as at agronomic rates stipulated by nutrient management plans. Direct or indirect discharges to surface water are prohibited under the General Order. Furthermore, discharges are prohibited from polluting groundwater or surface water, adversely affecting beneficial uses of groundwater, or causing an exceedance of any applicable Basin Plan water quality objective for groundwater or surface water. As a result, surface water quality and aquatic species are unlikely to be affected. The systems are also limited in size which may limit any effect on habitat or terrestrial based species. |
| B | Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | Less Than Significant Impact | This initial study does not address a site-specific evaluation. Instead, it focuses on typical waste generation, collection, transfer, storage, and disposal at existing CAFs along with known best management practices. Based on this information, construction of new, or expansion of existing CAF waste systems, are unlikely to result in cumulatively considerable effects on the environment, particularly in comparison to the currently unregulated state of CAF discharges, due to the proposed requirements in the General Order. The General Order is unlikely to change the land development economics of CAFs in a way that encourages more facilities and, therefore, it will not |

3.21. Mandatory Findings of Significance

| No. | Potential Impact | Impact Level | Discussion |
|-----|--|------------------------------------|--|
| | | | change the number of CAFs discharging. It is at the discretion of each local land use authority whether to allow the construction of new or expanded CAFs facilities in a given area. Local land use authorities also have discretion over more specific siting and design requirements. Therefore, it is speculative to analyze the cumulative impacts associated with constructing new facilities in a given area. |
| | | | State Water Board Resolution No. 68-16, the Statement of Policy with Respect to Maintaining High Quality of Waters in California (hereafter the Antidegradation Policy), requires disposal of waste into the waters of the state be regulated to achieve the highest water quality consistent with the maximum benefit to the people of the state. This is also consistent with language in the Basin Plan. When seeking coverage under this General Order, the Discharger needs to demonstrate the management practices necessary to maintain the highest water quality consistent with the maximum benefit to the people of the state will be implemented. The efficacy of the waste management system will be tracked using discharge monitoring and reporting. |
| С | Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | Less Than Significant Impact | Dischargers obtaining coverage under the General Order are subject to the State Water Board policies, the Lahontan Water Board Basin Plan and policies, and local agencies siting criteria. Additionally, the project will regulate waste discharge, ensuring implementation of best management practices in pursuit of improved or maintained water quality. The General |

| No. | Potential Impact | Impact Level | Discussion |
|-----|------------------|--------------|---|
| | | | Order is intended to benefit human beings through implementation of actions designed to protect surface and groundwater. |

3.22. Determination

On the basis of this initial evaluation:

| \boxtimes | I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. |
|-------------|--|
| | I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. |
| | I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. |
| | I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. |
| | I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. |

| Signature: | Date: |
|---------------|-------|
| Printed Name: | |

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