# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

# BOARD ORDER NO. R6T-2020-<mark>(TENTATIVE)</mark> GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL INDUSTRIAL WASTEWATER TREATMENT SYSTEMS

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The California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board) finds:

# COVERAGE ELIGIBILITY

# I. Eligibility Criteria

The Lahontan Water Board may enroll a person discharging wastewater for coverage under the Small Industrial Order provided all the following criteria are met:

## A. Site location

The facility is not located within an area prohibiting the type of discharge.

## B. Flow rate

The discharge is limited to a monthly average flow rate of 100,000 or less gallons per day of industrial wastewater.

# C. Waste type

Industrial waste streams are not combined with domestic waste streams.

# D. Setback limit

The facility complies with setback requirements from wastewater treatment areas and disposal areas from domestic wells, flowing and/or ephemeral streams, lakes/reservoirs, and property lines. These setback requirements are provided in Requirements 51 through 53.

# E. Order applicability

The Executive Officer has not determined the discharge would be better regulated by a waiver of WDRs, individual WDRs, a different general order, or a National Pollutant Discharge Elimination System (NPDES) Permit.

# **II. Application Process**

The application process is summarized in Attachment 2 as a Report of Waste Discharge (ROWD). Applicants may submit their ROWD directly to the Lahontan Water Board, or they may directly upload their ROWD through a digital portal. A complete application varies by category and includes all project-specific components of the ROWD designated for each category and outlined in Attachment 2. The technical report component of the ROWD includes submittal of project background, wastewater characterization, wastewater treatment description, and project-specific supplemental reports.

Upon review of ROWD, Lahontan Water Board staff will determine if coverage under the Small Industrial Order is appropriate. The Executive Officer will issue a notice of applicability (NOA) when coverage under the Small Industrial Order has been authorized. The NOA will contain the necessary site-specific monitoring and reporting requirements.

# **REGULATORY AUTHORITY**

## III. Purpose

The Lahontan Water Board has recognized a need to consistently and effectively regulate wastewater discharges to small wastewater treatment systems from facilities generating industrial wastewater at a monthly average flow rate of 100,000 or less gallons per day.

The most similar, existent general permit; the State Water Resources Control Board (State Water Board) Order WQ 2014-0153-DWQ, General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems (Small Domestic Systems Order); regulates the discharges from small domestic wastewater treatment and disposal systems. The Small Domestic Systems Order does not provide coverage for industrial (aka nondomestic) wastewater discharge.

The General Waste Discharge Requirements for Small Industrial Wastewater Treatment Systems (Small Industrial Order) will provide coverage for industrial wastewater dischargers of a monthly average flow rate of 100,000 or less gallons per day.

## **IV.Utility as General Order**

Water Code section 13263(i) states the State Water Board or a regional board may prescribe general waste discharge requirements (WDRs) for a category of discharges if the State Water Board or that regional board finds or determines that all the following criteria apply to the discharges in that category:

#### A. "The discharges are produced by the same or similar operations."

The wastewater regulated by the Small Industrial Order includes wastewater generated by industrial (nondomestic) sources. The source of industrial wastewater inherently influences the wastewater characteristics. Typically, these would be chemical constituents with minimal microbial activity or solids compared to domestic discharges.

The Small Industrial Order considers both the characteristics of the water supply to the industrial process and any chemical constituents added to wastewater during the industrial process. The characteristics of the water supply are used to inform the discharge effluent limits and the monitoring requirements.

The Small Industrial Order considers regulated disposal of wastewater via evaporation as having lower threat to underlying groundwater quality than disposal of wastewater via infiltration. This distinction is based on presuming wastewater disposed of via evaporation will stay isolated from pervious soils during the evaporation process. The Small Industrial Order splits systems using evaporative disposal into Evaporative Disposal Category and systems using infiltrative disposal into Infiltrative Disposal Category for the purposes of the report of waste discharge, order requirements, and monitoring and reporting.

1. Evaporative Disposal Category

Evaporative Disposal Category industrial wastewater includes any treated industrial wastewater disposed of via evaporation impoundment structure. Typical generators of Evaporative Disposal Category industrial wastewater include facilities producing a high total dissolved solids concentration in the wastewater flow. One example is reverse osmosis and filtration wastewater from small community drinking water systems and another example is cultivation irrigation water treatment and tailwater wastewaters from indoor agricultural operations, such as cannabis facilities. Any facility discharging treated wastewater to an infiltrating disposal system (e.g., percolation pond, on-site irrigation) are not eligible for this category.

Evaporative Disposal Category industrial wastewater does not make direct contact with a receiving water. Most wastewater in this category is evaporated and assumed to deposit residual constituents in a solid or slurry form. This solid or slurry material is disposed by the permittee at a separate, permitted facility. The evaporated water is assumed to have minimal threat to water quality and, because it is not discharged to an infiltrating disposal system, no explicit effluent limits are imposed on this category.

2. Infiltrative Disposal Category

Infiltrative Disposal Category industrial wastewater includes any treated industrial wastewater disposed via infiltration. This includes both surface and subsurface infiltration methods. Typical generators of Infiltrative Disposal Category industrial wastewater include facilities able to cost-effectively treat wastewater constituents to the effluent limits. Example facilities generating this type of wastewater include cannabis manufacturing, maintenance yards, and other commercial manufacturing operations.

Infiltrative Disposal Category industrial wastewater does make direct contact with a receiving water. Effluent limits are imposed on this category to ensure discharge is protective of receiving water quality. The effluent limits are relatively stringent with a default to drinking water maximum contaminant levels with an allowance for matching background concentrations, as applicable.

#### B. "The discharges involve the same or similar types of waste."

1. Typical Flow Characteristics

The wastewater discharges regulated by the Small Industrial Order have similar flow rates.

#### 2. Typical Wastewater Constituents

Typical wastewater constituents having potential to degrade groundwater include chemical constituents present in toxic concentrations, biodegradable organics, total dissolved solids, and nutrients. Each of the typical wastewater constituents are discussed below:

a) Priority pollutants, toxic organics, and heavy metals

Wastewater generated by nondomestic activities may contain concentrations of priority pollutants, organic and inorganic chemicals (e.g., cleaning agents, solvents, pesticides), persistent organic chemicals (e.g., PFAS, PCE), and heavy metals (e.g., As, Cd, Cr, Hg, Zn) higher than those typically found (zero to trace concentrations) in domestic wastewater. Constituents discharged from the treatment process at concentrations higher than standard thresholds (i.e., toxic concentrations) may degrade the beneficial use of the receiving waters.

b) Biodegradable organics

The presence of biodegradable organics can reduce dissolved oxygen in wastewater. The potential for reduction of dissolved oxygen is typically measured in terms of biochemical oxygen demand (BOD) or chemical oxygen demand (COD). Excessive BOD loading of lined treatment or storage units (LTSUs) or surface disposal systems (surface disposals) may result in nuisance odors or anaerobic conditions, which are not favorable biological treatment conditions.

c) Total dissolved solids

Total dissolved solids (TDS) consists of both volatile (organic) and fixed (inorganic) fractions. A varying concentration of volatile dissolved solids will exist in wastewater effluent depending upon the wastewater source and treatment technology. In a properly operated land application system, volatile dissolved solids in percolate are generally reduced to negligible concentrations (less than 2 mg/L) by filtration and biological degradation following percolation through five feet of soil.<sup>1</sup> However, fixed dissolved solids (FDS) do not degrade biologically. Elevated concentrations of FDS in land applied effluent can change soil chemistry and degrade groundwater quality.

Salinity is a measure of dissolved solids in water. Excessive salinity can reduce the beneficial uses of water. Salinity can be affected by the discharge of wastewater with elevated concentrations of TDS. In a welloperated land application system, volatile dissolved solids in percolate will be reduced to negligible concentrations.

<sup>&</sup>lt;sup>1</sup> USEPA, Process Design Manual, Land Treatment of Municipal Wastewater, Section 4.2.1, 1981.

d) Nutrients

Nitrogen and phosphorus are nutrients which can be present in nondomestic wastewater at concentrations that can degrade groundwater quality. The potential for degradation depends upon the wastewater treatment method and the environment into which the wastewater effluent is discharged. Nitrogen and phosphorus concentration reduction is not required in every situation, such as when wastewater treatment and application is performed in a way that is protective of the beneficial uses of water.

#### C. "The discharges require the same or similar treatment standards."

1. Treatment Flowrates

The Small Industrial Order limits a discharge monthly average flow rate of 100,000 or less gallons per day; therefore, only small discharges will be eligible for coverage. Wastewater potential to degrade water quality increases with constituent loading, which is a function of both constituent concentration and discharge flow rate. Constituent effluent concentrations are specified in the Small Industrial Order to protect water quality and to ensure a similar range of potential constituent loading for sites covered by the Small Industrial Order.

2. Treatment Methods

Wastewater treatment methods may vary by site and the available technologies are expected to evolve with time. However, the basic treatment processes will share similarities (e.g., flocculation, settling, filtration). Best practicable treatment or control (BPTC) may include lined evaporation ponds, aerobic treatment systems, sand/media filters, package treatment plants, constructed wetlands, activated sludge, membrane biological reactors, and mechanical aeration. This discussion of treatment and disposal alternatives is not intended to limit the selection of alternatives available to the wastewater system designer. Whatever treatment methods are deployed are expected to fully treat the wastewater to meet effluent limits, implemented based on the ROWD and contained in the NOA, before the wastewater reaches the disposal stage.

3. Disposal Methods

Wastewater disposal will occur through varied surface and subsurface land discharge methods. The choice of disposal method will depend upon the amount of wastewater generated, the value of the wastewater for irrigation, and the receiving environment. The type of disposal method selected is not assumed to affect the level of treatment or add additional treatment. Therefore, disposal methods share risks from a pollutant constituent standpoint and primarily differ based on physical risks to surrounding environment (e.g., potential to cause erosion) and are described in greater detail in the sections below.

a) Surface disposal

Wastewater surface disposal methods include, but are not limited to, percolation into the ground, irrigation at agronomic rates, and evaporation from an impoundment structure. These methods share similar operational requirements intended to mitigate the risk of groundwater degradation or nuisance odors. Example risks include vulnerability of impoundments to failure caused by damage from burrowing animals, nuisance odors resulting from BOD in impoundments, and nuisance conditions (e.g., offsite discharge) or degradation of groundwater quality due to inadequate acreage for land applications areas. These risks can be mitigated through activities intended to discourage burrowing animals, reducing BOD load and/or aerating impoundments.

b) Subsurface disposal

Wastewater subsurface disposal methods include, but are not limited to, discharge to a leachfield or seepage pit. Subsurface disposal may overload the receiving ground, if not properly designed. To mitigate this, systems should distribute the wastewater as widely as possible within the receiving area. Burrowing animals in these areas should be removed with any damage repaired promptly.

# D. "The discharges are more appropriately regulated under general discharge requirements than individual discharge requirements."

Permittees regulated under the Small Industrial Order have similar operations (industrial processes). The discharges have certain common characteristics (e.g., similar potential impact from constituents, disposal techniques, flowrates, treatment standards) for which the primary water quality concerns are nutrients, TDS, and toxicity. The discharges use similar treatment methods (e.g., screening, settling, chemical treatment, clarification). General WDRs are more appropriate than individuals WDRs because the similarity of the discharge is more efficiently regulated by a single, general WDRs than numerous nearly identical individual WDRs.

## V. Title 27 Considerations

The wastewater treatment, storage, and disposal activities described in the Small Industrial Order are exempt from the requirements of Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste in CCR, title 27, division 2, Subdivision 1, section 20005, et seq (Title 27). The activities are not subject to the requirements of Title 27 so long as the activity meets, and continues to meet, all preconditions listed:

Section 20090, Subparagraph (b) Wastewater—Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leach fields if the following conditions are met:

- (1) the applicable RWQCB has issued WDRs, reclamation requirements, or waived such issuance;
- (2) the discharge is in compliance with the applicable water quality control plan; and
- (3) the wastewater does not need to be managed according to Chapter 11, Division 4.5, Title 22 as a hazardous waste.

#### **VI.Antidegradation Analysis**

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 that:

Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.

Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.

The Small Industrial Order allows discharges to numerous groundwater bodies in the Lahontan Region, each with its own specific characteristics. Some of these waterbodies are considered high quality.

Limited degradation of groundwater by constituents, enumerated in Finding No. IV, associated with nondomestic wastewater effluent—after effective source control, treatment, and control measures are implemented—is expected to occur in some high quality waterbodies.

This degradation is consistent with the maximum benefit to the people of the state. The economic prosperity of communities and associated industry is of maximum benefit to the people of the state.

This discharge is not expected to unreasonably affect present and anticipated beneficial uses of such water or result in water quality less than the water quality objectives. The Small Industrial Order requires all discharges to comply with applicable either secondary or primary drinking water maximum contamination levels for many constituents. These requirements protect the beneficial use of waters such as for municipal water supply (MUN). Additionally, the Small Industrial Order does not allow discharge to the authorized disposal sites containing trace elements, pollutants or contaminants, or combinations thereof, in concentrations that are toxic or harmful to humans or to aquatic life or terrestrial plant or animal life.

The Small Industrial Order includes setbacks for wastewater treatment and disposal areas from domestic wells, flowing or ephemeral streams, lakes or reservoirs, and property lines. Setbacks provide attenuation of wastewater constituents through physical, chemical, and biological processes. The protection provided by setbacks comes from reduction in pathogens, when extant in discharge, and an opportunity for decomposition, dilution, or diffusion of chemical pollutants before these constituents enter a groundwater system.

The setbacks established in the Small Industrial Order are based on existing water quality protective setbacks. These existing setbacks were sourced from CCR, title 22, section 60310, the California Well Standards, the OWTS Policy, the California Plumbing Code, and commonly imposed setbacks by regulatory agencies. These setbacks are expected to limit affects to present and anticipated beneficial uses.

The Small Industrial Order allows discharges to numerous groundwater bodies in the Lahontan Region, each with its own specific characteristics. Therefore, the Small Industrial Order includes effluent limits for TDS, nitrogen, BOD, and toxicity of chemical constituents. Meeting these effluent limit requirements will ensure the BPTC for the wastewater constituent in question to maintain the highest water quality, consistent with the maximum benefit to the people of the state. In addition, the Small Industrial Order requires a monitoring program to ensure the applied treatment methods are being effectively operated and maintained.

When a discharge covered under the Small Industrial Order may be to high quality waters, the permittee needs to demonstrate implementation of BPTC necessary to maintain the highest water quality consistent with the maximum benefit to the people of the state. Meeting the effluent limit requirements will ensure the BPTC for the wastewater constituent are met. Typical BPTCs are described in Finding No. IV. The efficacy of this BPTC will be tracked using discharge monitoring and reporting and following required minimum setbacks.

The Small Industrial Order includes discharge monitoring and reporting program requirements for all treatment systems. These required plans allow the Lahontan

Water Board to monitor the continued capability of the treatment system to maintain effluent limits for constituents of concern found in the wastewater.

Effluent limitations for nitrogen are contained in the Small Industrial Order based on National Primary Drinking Water Regulations, which do not include a phosphorus maximum contaminant level. To ensure the nitrogen control is effective, the model monitoring and reporting program (MRP) provided as Attachment 3 includes monitoring that can be implemented to verify compliance with effluent limits. The Small Industrial Order includes a requirement to limit constituent concentrations in effluent discharged to receiving waters to below toxic levels. The Small Industrial Order includes for BOD, and a process to determine how to apply these limits.

## VII. Water Code Section 13241 Considerations

Water Code section 13263 states each regional board shall consider the provisions of section 13241 when prescribing waste discharge requirements. Factors to be considered include, but are not limited to, the following:

#### A. "Past, present, and probable future beneficial uses of water."

The Small Industrial Order identifies past, present, and probable future beneficial uses of groundwater in Attachment 1. The effluent limitations are based on water quality objectives to protect present or probable future beneficial uses of groundwater, including municipal and domestic supply, agricultural supply, and industrial service supply, and fresh water recharge.

# B. "Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto."

The Lahontan Region includes groundwater basins with diverse water quality conditions. Maps of significant groundwater basins are included as part of the Basin Plan. The water quality of some groundwater basins is considered to be high quality, while others are impacted by concentrations of constituents. The geology and soils of the Lahontan Region have been shaped by a variety of processes and are correspondingly diverse. The Lahontan Region is generally in a rain shadow; however, precipitation amount can be large (up to 70 inches) at higher elevations. The varied topography, soils, and microclimates of the Lahontan Region support a corresponding variety of plant and animal communities.

# C. "Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area."

The requirements of the Small Industrial Order will result in the protection of existing and probable future beneficial uses to the maximum benefit to the people of the state, by coordinated regulating and monitoring of discharges to groundwater basins in the Lahontan Region. The relatively uniform requirements

of a general order, as compared to a series of individual waste discharge requirements, provides for coordinated control of discharges to groundwater basins and, thus, a more predictable understanding of the cumulative impacts of discharges within a basin.

#### D. "Economic considerations."

The Lahontan Region encompasses approximately one quarter of the state's land mass and serves approximately two percent of the state's population. The extremely low population density in some rural areas precludes building sewer connections for all nondomestic systems. Businesses in rural areas provide significant economic opportunity to local communities, particularly those in economically disadvantaged areas, and may often need to use an onsite wastewater treatment system. Additionally, drinking water treatment systems in small communities typically produce wastewater streams from the treatment process (e.g., filtration tailwater), which need to be regulated as industrial wastewater. The cost of treating these wastewater streams may be decreased through streamlined regulation by the Small Industrial Order.

The Small Industrial Order provides a mechanism for new facilities to be built in areas without existing sewer systems, which may stimulate the economic growth required to eventually create centralized treatment systems.

#### E. "The need for developing housing within the region."

The Small Industrial Order would not directly affect housing availability in the region. However, it is possible that new facilities may be built in areas without existing sewer systems, possibly generating job growth which may indirectly impact the need for developing housing within the region.

#### F. "The need to develop and use recycled water."

The Small Industrial Order is not subject to the State Recycled Water Policy, because it does not treat domestic wastewater. This order provides for the land application of treated wastewater, akin to recycled water.

## VIII. Human Right to Water

Water Code section 106.3 establishes a state policy that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes, and directs state agencies to consider this policy when adopting regulations pertinent to water uses described in the section, including the use of water for domestic purposes.

These WDRs implement effluent limitations and requirements to meet established receiving water objectives and maintain designated beneficial uses of water, including municipal supply. Additionally, these WDRs provide a more streamlined approach to regulating industrial wastewater treatment systems that aligns with a

state-wide priority to ensure all Californians have access to safe and affordable drinking water.

# IX.California Environmental Quality Act

The Small Industrial Order is intended to cover both new/expanded and existing small industrial wastewater treatment systems. The Lahontan Water Board considered the environmental impacts associated with the adoption of the Small Industrial Order and prepared an Initial Study in accordance with CCR, title 14 section 15063. Analysis in the Initial Study and early consultation with responsible and trustee agencies did not identify any significant impacts on the environment. The conditions included in the Small Industrial Order and identified in the Negative Declaration will avoid potential significant effects or effects that are less the significant impact. Copies of the Initial Study and proposed Negative Declaration were transmitted to or made available to all agencies and persons know to be interested in these matters. The Lahontan Water Board will consider adopting the Negative Declaration (Resolution 2020-00\*\*) on March 11-12, 2020.

## X. Technical and Monitoring Reports

Water Code section 13267 provides the Lahontan Water Board with the authority to require technical and monitoring. The specific characteristics of each wastewater flow are identified in the ROWD for determination of an appropriate MRP. The technical reports in the reporting component of the MRP are required by the Small Industrial Order, the NOA, and the MRP. The Monitoring and Reporting Program is necessary to determine compliance with the conditions of this Order and to determine the discharges impacts, if any, on groundwater. As such, the burden, including costs, of this monitoring bears a reasonable relationship to the need for that information and the benefits to be obtained from that information.

## **XI.Public Notification**

The Lahontan Water Board has notified interested agencies and persons of its intent to prescribe waste discharge requirements, has provided an opportunity to submit written comments, and provided notice of a public hearing. A notice of the availability of a draft general order was also provided by posting a copy of the tentative WDRs to the Lahontan Water Board internet website.

## XII. Public Hearing

The Lahontan Water Board, in a public hearing, heard and considered all comments pertaining to this matter.

IT IS HEREBY ORDERED pursuant to Water Code sections 13260, 13263, and 13267 and in order to meet the provisions contained in division 7 of the Water Code and regulations and polices adopted thereunder, all dischargers subject to this Order must comply with the following:

### PROVISIONS

- The requirements prescribed herein do not authorize the commission of any act causing damage to the property of another, or protect the permittee from liabilities under federal, state, or local laws. The Small Industrial Order does not convey any property rights or exclusive privileges and does not create a vested right to continue to discharge wastewater.
- 2. The permittee must comply with all the conditions of the Small Industrial Order. Any noncompliance with the Small Industrial Order constitutes a violation of the Porter-Cologne Water Quality Control Act and/or Basin Plan and may be grounds for an enforcement action.
- 3. The Small Industrial Order neither relieves the permittee from responsibility to obtain other necessary local, state, or federal permits nor prevents imposition of additional standards, requirements, or conditions by any other agency.
- 4. The prohibitions, requirements, limitations, and provisions of the Small Industrial Order are severable. If any provision of the Small Industrial Order is held invalid, the remainder of the Small Industrial Order must not be affected.
- 5. Coverage of the Small Industrial Order may be terminated or modified for cause including, but not limited to, any of the following:
  - a. Violation of any of the terms or conditions contained in the Small Industrial Order.
  - b. Obtaining the Small Industrial Order by misrepresentation, or failure to disclose fully all relevant facts.
  - c. Change in any condition that results in either a temporary or permanent need to reduce or eliminate the authorized discharge.
  - d. Material change in either the character, location, or volume of discharge.

#### REQUIREMENTS

Dischargers are classified in the NOA as either Evaporative Disposal Category or Infiltrative Disposal Category permittees. Each row of the requirement tables contains the requirement number in the first column, the requirement text in the second column, and the applicability of the requirement for each treatment system category in columns three and four. Column three contains applicability information for Evaporative Disposal Category permittees: "yes" for applicable and "no" for not applicable. Column four contain applicability information for Infiltrative Disposal Category permittees: "yes" for applicable.

#### I. Prohibitions

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
1	Creation of pollution or threatened pollution, contamination, or nuisance as defined by section 13050 of the Water Code is prohibited.	Yes	Yes
2	The discharge of waste that causes violation of any numeric or narrative water quality objective contained in the Basin Plan is prohibited.	Yes	Yes
3	The discharge of waste in violation of any waste discharge prohibitions in the Basin Plan is prohibited.	Yes	Yes
4	The discharge of waste classified as hazardous (Cal. Code Regs., tit 23, § 2521 (a)) is prohibited.	Yes	Yes
5	The discharge of any waste to surface waters or surface water drainage courses is prohibited.	Yes	Yes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
6	<ul> <li>Bypass or overflow of treated or untreated waste is prohibited. The Lahontan Water Board and/or the Executive Officer may take enforcement action against the permittee for bypass except when one of the following two cases occurs: <ol> <li>Unavoidable and/or unscheduled bypass as defined by the combination of the following two bullet points:</li> <li>Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.</li> <li>There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities or retention of untreated waste. This does not apply to bypass that occurs during normal periods of equipment downtime or preventative maintenance, which reasonable engineering judgment should account for in the design.</li> </ol> </li> <li>Scheduled bypass as defined by the combination of the following four bullet points <ul> <li>Bypass is required for essential maintenance to assure efficient operation.</li> <li>Neither effluent nor groundwater limitations are exceeded.</li> <li>The permittee notifies the Executive Officer 10 days in advance.</li> <li>The prohibition against discharge to surface water is not violated.</li> </ul> </li> </ul>	Yes	Yes
7	The use of cesspools is prohibited.	Yes	Yes
8	The discharge of treated wastewater except to the disposal point(s) authorized in the NOA is prohibited.	Yes	Yes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
9	The discharge of waste to land not owned, operated, or controlled by the permittee is prohibited, except as described and documented in a waste management plan and ap proved by the Lahontan Water Board's Executive Officer (Executive Officer) in a NOA letter.	Yes	Yes

# II. Water Quality and Flow Limits

#### A. Effluent Limits

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
10	Wastewater discharged to all authorized disposal sites must not contain trace elements, pollutants or contaminants, or combinations thereof, in concentrations that are toxic or harmful to humans or to aquatic or terrestrial plant or animal life.	No	Yes
11	<ul> <li>Wastewater discharged to all authorized disposal sites must not contain constituent concentrations in excess of the effluent limit contained in this requirement, which are contained in the proceeding bulleted list</li> <li>BOD<sub>5</sub> at 30 milligrams per liter as quarterly average and 45 milligrams per liter as maximum</li> <li>TDS at 500 milligrams per liter as quarterly average</li> <li>Inorganic Chemicals, CCR, title 22, Table 64431-A of section 64431</li> <li>Organic Chemicals, CCR, title 22, Table 64444-A of section 64444</li> <li>Disinfection Byproducts, CCR, title 22, Table 64533-A of section</li> </ul>	No	Yes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
	64533 • Total Coliform, CCR, title 22, Paragraph (b) of Section 64426.1 The incorporation-by-reference of the CCR, title 22 provisions is prospective including future changes to the incorporated provisions as the changes take effect.		

## B. Receiving Water Limits

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
12	The permittee must take all reasonable steps to minimize any adverse impact to waters of the state resulting from noncompliance with the Small Industrial Order.	Yes	Yes
13	The permittee must not cause or contribute to exceedances of water quality objectives for groundwater contained in the Basin Plan.	Yes	Yes
14	In groundwater designated as MUN, the median concentration of coliform organisms over any seven-day period must be less than 1.1/100 milliliters.	Yes	Yes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
15	<ul> <li>Groundwater designated as MUN must not contain concentrations of chemical constituents in excess of the maximum contaminant level (MCL) or secondary maximum contaminant level (SMCL) based upon drinking water standards specified in the following provisions of CCR, title 22:</li> <li>Inorganic Chemicals, Table 64431-A of section 64431</li> <li>Organic Chemicals, Table 64444-A of section 64444</li> <li>SMCLs–Consumer Acceptance Limits, Table 64449-A of section 64449</li> <li>SMCLs – Consumer Acceptance Ranges, Table 64449-B of section 64449</li> <li>This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.</li> </ul>	Yes	Yes
16	Groundwater designated as AGR must not contain concentrations of chemical constituents in amounts that adversely affect the water for beneficial uses (i.e., agricultural purposes).	Yes	Yes
17	Groundwater designated as MUN must not contain concentrations of radionuclides in excess of the limits specified in CCR, title 22, section 64442, Table 64442, and section 64443, Table 64443 which are incorporated by reference into the Small Industrial Order. This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.	Yes	Yes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
18	<ul> <li>Groundwater must not contain taste or odor-producing substances in concentrations that cause nuisance or that adversely affect the beneficial uses. For groundwater designated as MUN, at a minimum, concentrations must not exceed adopted secondary maximum contaminant levels specified in CCR, title 22</li> <li>SMCLs–Consumer Acceptance Limits, Table 64449-A of section 64449</li> <li>SMCLs – Consumer Acceptance Ranges, Table 64449-B of section 64449</li> <li>This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.</li> </ul>	Yes	Yes

#### C. Flow Rate Limits

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
19	Wastewater entering the treatment system must not exceed the design capacity as stated in the NOA. The flow rate of wastewater discharged to the headworks must not exceed 100,000 gallons per day as a monthly daily average	Yes	Yes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
20	A permittee whose wastewater flow rate has been increasing, or is projected to increase, must estimate when the flow rate will reach hydraulic and treatment capacities of its treatment, collection, and disposal facilities. The projections must be made annually, in January, based on the previous 3 years average dry weather flow rates, peak wet weather flow rates, and total annual flow rates, as applicable. When any projection shows that capacity of any part of the facilities may be exceeded in 4 years, the permittee must notify the Executive Officer according to the monitoring and reporting program (MRP).	Yes	Yes

# III. Siting, Design, Construction, Operation, and Maintenance

#### A. General

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
21	The siting, design, construction, operation, and maintenance of the	Yes	Yes
	wastewater system must comply with the requirements of the Basin Plan.	Yes	Yes
22	The facility must be sited, designed, constructed, operated, and maintained consistent with the information provided in the ROWD.		
23	If the system is located within or near the boundaries of a centralized wastewater district or regional service area, the permittee must demonstrate an attempt to connect to the centralized system and provide evidence that connection to the system was not approved or infeasible.	Yes	Yes
24	The permittee must ensure that all site operating personnel are familiar	Yes	Yes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
	with the contents of the wastewater system NOA and the Small Industrial		
	Order. A copy of the Small Industrial Order, the NOA, and technical		
	reports required by the Small Industrial Order (not including previously		
	submitted monitoring reports) must be kept at the wastewater treatment		
	facility for reference by operating personnel.		
25	The permittee must limit access to the wastewater system to authorized persons.	Yes	Yes
26	The permittee must halt construction in the event of an inadvertent discovery of a paleontological resource until a qualified archaeologist can assess the significance of the find and, if necessary, treatment measures are developed in consultation with appropriate agencies and tribal representatives.	Yes	Yes
27	<ul> <li>The permittee must permit representatives of the Lahontan Water Board and/or the State Water Board, upon presentation of credentials, to:</li> <li>1. Enter premises where wastes are treated, stored, or disposed of, and facilities in which any records are kept.</li> <li>2. Copy any records required by the Small Industrial Order.</li> <li>3. Inspect at reasonable hours, monitoring equipment required by the Small Industrial Order.</li> <li>Sample, photograph, and/or video record any discharge, waste material, waste treatment system, or monitoring device.</li> </ul>	Yes	Yes
28	The permittee must pay an annual fee to the State Water Board in accordance with the fee schedule for each fiscal year (CCR, title 23, § 2200). Fees are based on threat to water quality and complexity ratings, will be determined based on information in the ROWD, and subject to	Yes	Yes

Requirement Number	Requirement Text         revision by the State Water Board. Annual invoices are issued by the         State Water Board for the state fiscal year (July 1 to June 30).	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
29	<ul> <li>Permittees who want to terminate coverage under the Small Industrial Order must submit a Notice of Termination (NOT). The following requirements apply to the termination process: <ol> <li>The NOT must include the reporting items contained in Requirement 98.</li> <li>The permittee must remain enrolled under the Small Industrial Order until notified of enrollment termination approval by the Executive Officer.</li> <li>Lahontan Water Board staff may inspect the facility prior to enrollment termination approval.</li> </ol> </li> <li>The permittee is responsible for any permit fees associated the Small Industrial Order until enrollment termination approval is received.</li> <li>The permittee and/or landowner(s) remain responsible for any water quality degradation that results from the facility after being notified of enrollment termination approval by the Executive Officer</li> </ul>	Yes	Yes

#### **B. Licensed Professionals**

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
30	The facility design, including drawings and reports, and the operation and maintenance plans, as described in the ROWD, must be prepared by a California licensed professional civil engineer.	Yes	Yes
31	The as-built condition of the treatment system must be approved by a California licensed professional civil engineer.	Yes	Yes
32	Service to the treatment system (repairs, pumping, etc.) must be performed only by a California licensed General Engineering (A), Plumbing (C-36), or Sanitation System (C-42) contractor, unless the work is exempted in accordance with Business & Professions Code section 7044 or 7048.	Yes	Yes
33	The technical report; required as part of the ROWD and outlined, in Attachment 2; must be prepared by a California licensed professional civil engineer.	No	Yes
34	Wastewater treatment plants must be supervised and maintained by persons possessing a California professional civil engineer license.	No	Yes

# C. Maintenance and Changes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
35	The permittee must maintain in good working order and operate as efficiently as possible any treatment facility component, treatment control system, and monitoring device which have been installed to achieve compliance with the Small Industrial Order and the NOA.	Yes	Yes
36	The permittee must retain maintenance records for a minimum of three years. Maintenance records must be retained for any treatment facility component, treatment control system, and monitoring device which have been installed to achieve compliance with the Small Industrial Order and the NOA.	Yes	Yes
37	The permittee must maintain a record of all service activities for a minimum of five years. At a minimum, the record must include the date, nature of service, service company name, and service company state contractor license number.	Yes	Yes
38	<ul> <li>Before making material change in the character, location, or volume of discharge, the permittee must notify the Executive Officer. Material change includes, but is not limited to, any of the following:</li> <li>1. Increase in area or depth used for waste disposal beyond that specified in the NOA.</li> <li>2. Significant change in disposal method, location, or volume (e.g., change from subsurface disposal to percolation inside an impoundment)</li> <li>The Executive Officer may require that a ROWD be submitted.</li> </ul>	Yes	Yes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
39	At least <b>90 days</b> prior to termination or expiration of any lease, contract, or agreement involving disposal areas or off-site reuse of effluent used to justify the capacity authorized herein and assure compliance with the Small Industrial Order, the permittee must notify the Executive Officer in writing of the situation and of what measures have been taken or are being taken to assure full compliance with the Small Industrial Order and the NOA.	Yes	Yes

# D. Emergency Preparedness Response

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
40	The fact that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the Small Industrial Order must not be a defense for the permittee's violations of the Small Industrial Order.	Yes	Yes
41	For any electrically operated equipment at the site, the failure of which would cause loss of control or containment of waste materials, or violation of the Small Industrial Order, the permittee must employ safeguards to prevent loss of control over wastes. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures, or other means.	Yes	Yes
42	An emergency response plan must be submitted with ROWD.	Yes	Yes

Requirement	Requirement Text	Applicable to	Applicable to
Number		Evaporative	Infiltrative
		Disposal	Disposal
		Category	Category
	The emergency response plan must be complied with in its entirety, must		
43	be maintained at the treatment facility, and must be presented to the	Yes	Yes
	Lahontan Water Board staff upon request or as required by the NOA.		
	A permittee who wishes to establish the affirmative defense of an upset		
	in an action brought for noncompliance must demonstrate, through		
	properly signed, contemporaneous operating logs, or other evidence, that		
	the following are true:		
	1. An upset occurred, and the cause(s) of the upset can be identified.		
	2. The permitted wastewater system was being properly operated at the		
44	time of the upset.	No	Yes
	3. The permittee submitted notice of the upset as required in		
	Requirement 6.		
	4. The permittee complied with any remedial measures required by the		
	Small Industrial Order, the NOA, or direction from the Executive		
	Officer. In any enforcement proceeding, the permittee seeking to		
	establish the occurrence of an upset has the burden of proof.		

# E. Best Practicable Treatment or Controls (BPTCs)

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
45	<ul> <li>Treatment and disposal of wastewater must demonstrate BPTC for wastewater. BPTC must be demonstrated by compliance with all of the following:</li> <li>1. Compliance with the Small Industrial Order</li> <li>2. Compliance with the NOA, which specifies the following (at a minimum):</li> <li>3. Site-specific flow limit(s) based on reported design flowrate.</li> <li>4. Site-specific wastewater system treatment and disposal methods.</li> <li>5. Applicable effluent limits.</li> </ul>	Yes	Yes
46	Nuisance odors must not be perceivable beyond the property line of the wastewater treatment facility.	Yes	Yes
47	Public contact with wastewater must be deterred through such means as fences, signs, and other acceptable alternatives.	Yes	Yes
48	The discharge must always remain within the disposal area designated in the NOA.	Yes	Yes

#### F. Setbacks

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
49	The wastewater system 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 wastewater surface impoundment structures, if applicable, or otherwise rendering the wastewater system inoperable.	Yes	Yes
50	<ul> <li>Open-air surface impoundment structures must comply with the following setbacks, unless the site is already existing and not causing nuisance conditions:</li> <li>100 feet for domestic wells</li> <li>100 feet for flowing stream or ephemeral stream drainages</li> <li>50 feet for property lines</li> <li>200 feet for lakes and reservoirs</li> </ul>	Yes	Yes
51	<ul> <li>Enclosed treatment/storage systems structure must comply with the following setbacks, unless the site is already existing and not causing nuisance conditions:</li> <li>50 feet for domestic wells</li> <li>50 feet for flowing stream or ephemeral stream drainages</li> <li>5 feet for property lines</li> <li>50 feet for lakes and reservoirs</li> </ul>	No	Yes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
52	<ul> <li>Subsurface infiltrative disposal systems must comply with the following setbacks, unless the site is already existing and not causing nuisance conditions:</li> <li>100 feet for domestic wells</li> <li>100 feet for flowing stream or ephemeral stream drainages</li> <li>5 feet for property lines</li> <li>200 feet for lakes and reservoirs</li> </ul>	No	Yes
53	<ul> <li>Surface infiltrative disposal systems must comply with the following setbacks, unless the site is already existing and not causing nuisance conditions:</li> <li>50 feet for domestic wells</li> <li>25 feet for flowing stream or ephemeral stream drainages</li> <li>25 feet for property lines</li> <li>200 feet for lakes and reservoirs</li> </ul>	No	Yes

# IV.Surface Impoundment Structures (Impoundments)

#### A. Freeboard

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
54	Freeboard must always be maintained in impoundments to provide adequate storage capacity and prevent wastewater spills. Freeboard must be measured vertically from the lowest elevation of the impoundment berm to the impoundment water surface. If freeboard is less than two feet, the permittee must immediately implement the contingency plan contained in the <i>Spill Prevention and Emergency</i> <i>Response Plan</i> (Requirement 42 of the Small Industrial Order).	Yes	Yes
55	Surface impoundment structures must have capacity to accommodate wastewater, design seasonal precipitation, ancillary inflow/infiltration (I/I), and wind driven waves. Design seasonal precipitation capacity must be maintained as the depth(s) equivalent to the combined 25-year, 24-hour storm runoff volume captured by the impoundment(s) and two feet of freeboard in the impoundment(s).	Yes	Yes

#### B. Containment

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
56	Surface water impoundments not designed for the percolation of treated wastewater (e.g., evaporation or storage ponds) must be designed, constructed, operated, and maintained to meet a hydraulic conductivity of $1.0 \times 10^{-6}$ centimeters per second or less. A monitoring device under the lowest point of the pond must be installed to provide assurance of the earliest possible detection or prevention of a release from the pond.	Yes	Yes
57	Burrowing animals active in areas that may compromise the integrity of an impoundment containment must be promptly controlled and repairs to the containment completed as soon as possible.	Yes	Yes
58	An erosion control program must be implemented to ensure that small coves and irregularities are not created around the perimeter of the water surface.	Yes	Yes

## C. Mosquitoes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
59	Weeds must be minimized through control of water depth, a shoreline synthetic liner, harvesting, or herbicides.	Yes	Yes
60	Dead algae, vegetation, and debris must be removed from the water surface.	Yes	Yes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
61	Coordination with the local mosquito abatement or vector control district to supplement the measures described above in cases where other methods are infeasible	Yes	Yes

# V. Sludge/Solids Producing Systems

# A. Sludge Management Plan

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
62	For facilities generating sludge, a Sludge Management Plan must be submitted as part of ROWD.	Yes	Yes
63	The Sludge Management Plan must be complied in its entirety, must be maintained at the treatment facility, and must be presented to the Lahontan Water Board staff upon request or as required by the NOA.	Yes	Yes
64	The Executive Officer must be notified of any changes in an approved Sludge Management Plan at least 90 days in advance of the proposed change.	Yes	Yes
65	Modifications to a Sludge Management Plan deemed part of an emergency action must be noticed to the Executive Officer within five days of disposal with a rationale for the emergency modification.	Yes	Yes

# B. Storage

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
66	Any storage of residual sludge and solid residue at the wastewater treatment system must be temporary, and the waste must be controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or at concentrations that will exceed the Basin Plan receiving water limits.	Yes	Yes

# C. Disposal

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
67	Residual sludge and solid residue must be disposed in a manner approved by the Executive Officer and consistent with the Consolidated Requirements for Treatment, Storage, Processing, or Disposal of Solid Waste pursuant to CCR, title 27, division 2. Removal for further treatment, disposal, or reuse at disposal sites operated in accordance with valid WDRs issued by the State Water Board or Lahontan Water Board will satisfy this specification.	Yes	Yes

# VI.Percolating/Infiltrating Surface Disposal Systems (Surface Disposal)

## A. Precipitation and wind

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
68	Wastewater must not be applied to a surface infiltrative disposal area within 24 hours of forecasted precipitation with a greater than 50-percent probability of occurring, during precipitation events, or when the surface disposal surface soil is saturated.	No	Yes
69	Wastewater must not runoff from a surface infiltrative disposal area.	No	Yes
70	Spray irrigation with treated wastewater is prohibited when wind speed (including gusts) exceeds 30 miles per hour. Wind speed may be measured onsite or at a nearby weather station operated by a governmental organization.	No	Yes

# B. Mosquitoes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
71	Surface infiltrative disposals must have no standing water 48 hours after application of wastewater.	No	Yes
72	Tailwater ditches must be maintained essentially free of emergent, marginal, or floating vegetation.	No	Yes
73	Low-pressure and unpressurized pipelines and ditches accessible to mosquitoes must not be used to store wastewater water.	No	Yes

Requirement	Requirement Text	Applicable to	Applicable to
Number		Evaporative Disposal Category	Infiltrative Disposal Category
74	The permittee must coordinate with the local mosquito abatement or vector control district to supplement the measures described in Requirements 71, 72, and 73 when those methods are infeasible.	No	Yes

# VII. Subsurface Disposal Systems (Subsurface Disposal)

## A. Surfacing

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
75	Wastewater must not surface in any location of the infiltrative disposal area.	No	Yes

#### B. Siting

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
76	Subsurface disposal systems must hold in reserve land area for possible future 100-percent replacement of the subsurface disposal system or establish an equivalent contingency that is approved by the Executive Officer and described in the NOA. If less than 100-percent replacement area was previously permitted under existing individual WDRs, the minimum reserve area previously permitted must be maintained.	No	Yes

Requirement	Requirement Text	Applicable to	Applicable to
Number		Evaporative	Infiltrative
		Disposal	Disposal
		Category	Category
77	Separation of the disposal system(s) must be equal to or greater than two feet.	No	Yes

### C. Maintenance

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
78	All new or rehabilitated disposal areas associated with effluent pressure distribution systems (pressure-dosed systems) must be equipped with cleanouts or a flushing system to allow solids to be removed from distribution pipes and orifices when needed.	No	Yes
79	Deep rooted plants such as trees or shrubs must be removed as needed from a subsurface disposal system area to prevent damage to the dispersal system by roots.	No	Yes
80	Burrowing animals active in areas that may result in wastewater leakage from an at-grade or above grade (mound) disposal system must be promptly controlled and repairs to the disposal system completed as soon as possible.	No	Yes

# VIII. Monitoring

## A. General

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
81	The permittee must retain records of all monitoring information, including all calibration and maintenance records, all original strip chart recordings of continuous monitoring instrumentation, copies of all reports required by the Small Industrial Order, and records of all data used to complete ROWD for the Small Industrial Order. Records must be maintained for a minimum of 3 years from the date of the sample, measurement, report, or application. This period may be extended due to any unresolved litigation regarding this discharge or when requested by the Executive Officer.	Yes	Yes

# B. Sampling

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
82	Unless otherwise approved by the Executive Officer, all analyses must be conducted at a laboratory certified for the analyses by the DDW Environmental Laboratory Accreditation Program. If a certified laboratory is not available to the permittee, analyses performed by a noncertified laboratory will be accepted provided an acceptable Quality Assurance/Quality Control Program is instituted by the laboratory. A manual containing the steps followed in this program must be kept in the laboratory and must be available for inspection by Lahontan Water Board staff. The Quality Assurance/Quality Control Program must conform to USEPA guidelines or to procedures approved by the Lahontan Water Board.	Yes	Yes
83	The permittee must comply with the MRP issued with the NOA, and any future revisions, as specified by the Executive Officer. A framework for developing an MRP relevant to either discharge category is provided as Attachment 3. However, the Executive Officer may modify or replace the MRP for site-specific treatment and disposal conditions when issuing the NOA or revise the MRP when deemed necessary.	Yes	Yes
84	The permittee must complete any additional investigations or monitoring to demonstrate beneficial uses of water are protected and antidegradation requirements are satisfied including, but not limited to, evaluation of the wastewater system's treatment performance, groundwater monitoring, or additional sampling to characterize the wastewater discharge as required by the Executive Officer or Water Board.	Yes	Yes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
85	The duration of the sampling period must be in accordance with the monitoring and reporting program.	Yes	Yes
86	Treated wastewater samples must be collected downstream of all treatment works where a sample representative of the discharge can be obtained prior to disposal. In some cases, it may be necessary to collect samples for different analyses from different sampling locations.	No	Yes
87	The method of compositing samples must be reported with the results.	No	Yes

# C. System Failures

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
88	The permittee must complete accelerated or additional monitoring deemed necessary by the Executive Officer or Water Board when determining the nature and impact of any noncompliant action or incident.	Yes	Yes
89	All monitoring and analysis instruments and devices used by the permittee to fulfill the prescribed MRP must be properly maintained and calibrated as recommended by the manufacturer to ensure their continued accuracy.	No	Yes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
90	The permittee must construct all groundwater monitoring wells to meet or exceed the standards stated in Department of Water Resources' Bulletins 74-81, 74-90, and subsequent revisions unless deviation is approved by the Lahontan Water Board's staff or local well construction enforcing agency and must comply with the reporting provisions for wells pursuant to Water Code section 13751.	No	Yes

# IX.Reporting

#### A. General

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
91	All noncompliance issues must be reported with the next regularly scheduled monitoring report in addition to any other reporting requirements.	Yes	Yes
92	The permittee must furnish, within a reasonable time, any information the Lahontan Water Board's staff may request to determine whether cause exists for modifying, revoking, reissuing, or terminating the permittee's coverage under the Small Industrial Order.	Yes	Yes
93	The permittee must furnish to the Lahontan Water Board's staff upon request, copies of records required to be kept by the Small Industrial Order.	Yes	Yes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
94	The permittee must provide electronic submittals of reports or data as specified by the Lahontan Water Board. Contact and mail address information is available on the NOA or at: https://www.waterboards.ca.gov/lahontan/about_us/contact_us.html	Yes	Yes
95	<ul> <li>All reports submitted in response to the Small Industrial Order, including monitoring reports, must be signed by a person identified below:</li> <li>For a corporation: by a principal executive officer of at least the level of senior vice-president.</li> <li>For a partnership or sole proprietorship: by a general partner or the proprietor.</li> <li>For a municipality, state, federal, or other public agency: by either a principal Executive Officer or ranking elected or appointed official.</li> <li>A duly authorized representative of a person described above if all the following are completed: <ul> <li>The authorization is made in writing by a person described above.</li> <li>The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a waste management unit, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)</li> <li>The written authorization is submitted to the Lahontan Water Board.</li> </ul> </li> </ul>	Yes	Yes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
96	Any person signing a document under this section must make the following certification: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."	Yes	Yes
97	In the event of any change in control or ownership of the facility or wastewater disposal areas, the permittee must notify the succeeding owner or operator of the existence of the Small Industrial Order by letter, a copy of which must be immediately forwarded to the Executive Officer.	Yes	Yes

Requirement	Requirement Text	Applicable to	Applicable to
Number		Evaporative	Infiltrative
		Disposal	Disposal
		Category	Category
	At least 90 days prior to ending coverage under the Small Industrial		
	Order, a permittee must submit an NOT as described in Requirement 29.		
	The NOT must contain the following:		
	Permittee and site information contained within the NOA.		
	Date the site will cease discharging.		
	How the site will be decommissioned to prevent discharges that		
	degrade water quality.		
98	<ul> <li>Any proposed construction activities, including a project implementation schedule.</li> </ul>	Yes	Yes
	A final MRP report in accordance with Requirement 83.		
	Certification, by the permittee, of the following:		
	<ul> <li>Request for enrollment termination</li> </ul>		
	<ul> <li>The date the site will cease discharge</li> </ul>		
	Discharges associated with the previously authorized activities will cease		
	on the specified date.		

# B. Sampling and Analysis Plan (SAP)

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
99	Within <b>90 days</b> of the issuance of an NOA containing an MRP, the permittee must prepare and implement a written sampling and analysis plan (SAP) to assure compliance with the terms of the Small Industrial Order and the NOA.	No	Yes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
100	Anyone performing sampling on behalf of the permittee must be familiar with the SAP.	No	Yes
101	SAPs must address the need for sample filtration and how filtration will be accomplished.	No	Yes
102	<ul> <li>When sampling groundwater or liquid waste, the chemical constituents available to migrate must be considered in the following two ways:</li> <li>At facilities where the waste only threatens groundwater, samples must be filtered prior to chemical preservation, digestion, or analysis for some analytes.</li> <li>At facilities where overland flow of liquid waste to surface water is possible, the total constituent concentrations may be available for movement and analyses must be conducted on unfiltered samples.</li> </ul>	No	Yes
103	<ul> <li>At a minimum, the SAP must describe the following:</li> <li>Sample chain-of-custody procedures and documentation.</li> <li>Sampling locations.</li> <li>Sampling frequencies.</li> <li>Sample handling/preservation procedures.</li> <li>Analytical methods.</li> <li>Sample containers, preservatives, and holding times.</li> <li>For groundwater monitoring, well purging and field methods.</li> </ul>	No	Yes
104	The SAP must be maintained at the treatment facility and must be presented to the Lahontan Water Board staff upon request or as required by the NOA.	No	Yes

# C. System Failures

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
105	If the permittee does not comply, or will be unable to comply, with a requirement related to effluent quality, pond freeboard, flow rate, or bypass or overflow issues (i.e., noncompliance), then the permittee must notify the Lahontan Water Board staff by telephone. Phone numbers for Lahontan Water Board offices may be found on the NOA or on the internet at the Lahontan Water Board website.	Yes	Yes
106	Notification of noncompliance must occur as soon as the permittee or its agents have knowledge of such noncompliance or potential for noncompliance, and the permittee must confirm this notification in writing within 10 days. The written notification must state the date, time, nature, cause of noncompliance, immediate response action, and a schedule for corrective actions.	Yes	Yes
107	In the event of any unauthorized release of untreated wastewater from the permittee's treatment system that causes, or probably will cause, a discharge to a water of the state, the permittee must notify Regional Water Quality Control Board (i.e., notification of unauthorized discharge) as soon as possible, but no later than two (2) hours after becoming aware of the release. The phone number for reporting these releases of sewage to the Lahontan Water Board offices may be found on the NOA or on the internet at the Lahontan Water Board website.	Yes	Yes

Requirement Number	Requirement Text	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
108	<ul> <li>The permittee shall, at a minimum, include the following information in a notification of unauthorized discharge:</li> <li>The location, date, and time of the release.</li> <li>The water body that received or will receive the discharge.</li> <li>An estimate of the amount of sewage or other waste released and the amount that reached a surface water at the time of notification.</li> <li>If ongoing, the estimated flow rate of the release at the time of notification.</li> <li>The name, organization, phone number, and email address of the reporting representative.</li> </ul>	Yes	Yes
109	In the event of a wastewater containment failure, the permittee must immediately notify California Governor's Office of Emergency Services (CalOES). Notification must be provided as soon as possible and when the notice can be provided without substantially impeding cleanup or other emergency measures pursuant to Water Code section 13271. A written report to the Executive Officer must be submitted within 10 days of the failure describing the cause of the failure and how a recurrence will be prevented. Such a failure must be promptly corrected in accordance with the requirements of the Small Industrial Order.	Yes	Yes

I, Patty Z. Kouyoumdjian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order to be considered for adoption by the California Regional Water Quality Control Board, Lahontan Region, on March 11-12, 2020.

PATTY Z. KOUYOUMDJIAN EXECUTIVE OFFICER

Attachments: Attachment 1: Background for General Order Attachment 2: Report of Waste Discharge Attachment 3: Monitoring and Reporting Program Framework

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

# BOARD ORDER NO. R6T-2020-<mark>(TENTATIVE)</mark> GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL INDUSTRIAL WASTEWATER TREATMENT SYSTEMS

### ATTACHMENT 1: BACKGROUND FOR GENERAL ORDER

#### I. Report of Waste Discharge

Water Code section 13260(a) requires that any person discharging waste within any region that could affect the quality of the waters of the state, or proposing to do so, must file a Report of Waste Discharge (ROWD), to obtain coverage under the Waste Discharge Requirements (WDRs) Program or a waiver for this program. These requirements do not apply to community sewer systems.

#### **II. Definitions**

Water Code section 13050(d) defines "person", "waste", "regional board", "waters of the state", and other applicable terms.

For the purposes of the Small Industrial Order, the following terms are defined as:

**7-day median** is calculated as the median concentration of the results for the last 7 calendar days. If only one sample is collected within a 7-day period, then that one sample becomes the 7-day median value.

**Average annual rainfall** means the average of the annual amount of precipitation for a location over a year. This can be estimated using the nearest National Weather Service station for any contiguous 30-year time segment, at a minimum, preceding an application. For example, a suitable data set used in 2019 would be 1981 to 2010.

**Bypass** refers to the intentional diversion of waste streams from any portion of a treatment facility.

**Cesspool** refers to, but is not limited to, an excavation or device that allows wastewater infiltration into the soil without treatment.

**Composite sample** (unless otherwise specified) is a combination of individual samples collected over the specified sampling period.

**Daily maximum concentration** is the highest measurement recorded for any grab or composite sample collected during a day in a calendar month.

**Day** is the mean solar day of 24 hours beginning at mean midnight and are calendar day.

**Domestic wastewater** means wastewater with a measured strength less than highstrength wastewater and is the type, or like the type, of wastewater normally discharged from plumbing fixtures, appliances and other household devices including, but not limited to toilets, bathtubs, showers, laundry facilities, dishwashing facilities, and garbage disposals. Domestic wastewater may include wastewater from commercial buildings such as office buildings, retail stores, and some restaurants, or from industrial facilities where the domestic wastewater is segregated from the industrial wastewater. Domestic wastewater may include incidental RV holding tank dumping but does not include wastewater consisting of a significant portion of RV holding tank wastewater such as at RV dump stations. Domestic wastewater does not include wastewater from industrial processes.

**Ephemeral stream drainage** denotes a surface water drainage feature that flows only after rain or snowmelt and does not have enough groundwater seepage (baseflow) to maintain a condition of flowing surface water. The drainage is measured from a line that defines the limit of the ordinary highwater mark. Irrigation canals are not considered ephemeral streams drainage features. The ephemeral stream is a "losing stream" (discharging surface water to groundwater) at the proposed wastewater system site.

**Flow-weighted sample** is collected at varying time intervals (average interval one hour or less) so that each sample represents an equal portion of the cumulative flow.

A flowing stream is measured from the ordinary highwater mark.

Grab sample is an individual sample collected in less than 15 minutes.

**Headworks** refers to the facilities where wastewater enters a wastewater treatment plant, which may include bar screens, comminutors, a wet well, and pumps.

**High-strength wastewater**, as defined by the Onsite Water Treatment Systems Policy, means wastewater having a 30-day average concentration of biochemical oxygen demand (BOD) greater than 300 milligrams per liter, total suspended solids greater than 330 milligrams per liter or a fats, oil, and grease (FOG) concentration greater than 100 milligrams per liter prior to [entering the treatment portion of the wastewater system].

**Industrial wastewater** refers to wastewater generated by industrial or commercial sources and kept separate from domestic wastewater. Examples include high-strength discharges from restaurants or commercial food processing plants in excess of 900 milligrams per liter of BOD, cannabis cultivation or manufacturing practices, maintenance yards, manufacturing facilities, and other commercial operations.

**Monthly average concentration** is the arithmetic mean of measurements recorded during a calendar month. If only one sample is collected in a calendar month, then that sample measurement is the monthly average concentration.

**Monthly average flow** is the total discharge by volume during a calendar month divided by the number of days in the month that the facility was discharging. This number is reported in gallons per day or million gallons per day.

**Onsite Wastewater treatment systems (OWTS)** means individual disposal systems, community collection and disposal systems, and alternative collection and disposal systems that use subsurface disposal. The short form of the term may be singular or plural. OWTS do not include "graywater" systems pursuant to Health and Safety Code section 17922.12.

**Ordinary highwater mark** is established by fluctuations of water elevation and indicated by characteristics such as shelving, changes in soil character, vegetation type, presence of litter or debris, or other appropriate means.

**Permittee** (also known as **Discharger**) refers to a person or entity discharging or proposing to discharge waste under the Small Industrial Order.

**Residual sludge** means sludge that will not be subject to further treatment at the wastewater system.

**Severe property damage** means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

**Sludge** means the solid, semisolid, and liquid residues removed during primary, secondary, or other wastewater treatment processes.

**Small Industrial Order** refers to the General Waste Discharge Requirements for Small Industrial Wastewater Treatment Systems.

Solid residue refers to grit and screenings generated during preliminary treatment.

Source water is the untreated water originating from a surface or below ground source.

**Surface impoundment structures** refer to structures impounding water on the ground surface and include treatment, storage, and percolation ponds; constructed wetlands; and land application areas that eliminate runoff via an impoundment structure.

**Time-weighted sample** is collected at equal time intervals, with a maximum interval of one hour.

**Upset** means an exceptional incident in which there is unintentional and temporary noncompliance with effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper action.

**Wastewater system** means the collection system, treatment equipment, pumping stations, surface impoundment structures for treatment or storage (including ponds and wetlands), clarifiers, sand/media filters, disinfection systems, recycled water systems (including distribution systems), and other systems associated with the collection, treatment, storage, and disposal of wastewater.

**Wastewater treatment plant** refers to any of the following, but does not include onsite sewage treatment systems as defined in <u>Water Code section 13290</u>:

- "A facility owned by a state, local, or federal agency and used in the treatment or reclamation of sewage or industrial wastes;"
- "A privately-owned facility used in the treatment or reclamation of sewage or industrial wastes, and regulated by the Public Utilities Commission pursuant to

sections 216 and 230.6 of, and chapter 4 (commencing with section 701) of part 1 of division 1, of the Public Utilities Code; or"

• "A privately-owned facility used primarily in the treatment or reclamation of sewage, and for which the State Water Board or a Regional Water Board has issued waste discharge requirements."

## **III. OWTS Policy**

State Water Resources Control Board (State Water Board) adopted the Water Quality Control Policy for Siting, Design, Operation and Maintenance of Onsite Wastewater Treatment Systems (OWTS Policy, which can be found at https://www.waterboards.ca.gov/water\_issues/programs/owts/board\_adopted\_policy.shtm I) on June 19, 2012 and the OWTS Policy became effective May 13, 2013. The OWTS Policy established a statewide, risk-based, tiered approach for regulation and management of installations and replacements of OWTS with disposal of domestic strength and, in limited instances, high-strength wastewater, as defined in the OWTS Policy, generated from a commercial food service business. The OWTS Policy does not address typical industrial wastewater.

## **IV.Small Domestic Systems General Order**

State Water Resources Control Board (State Water Board) Order WQ 2014-0153-DWQ, General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems (Small Domestic Systems Order) was adopted by the State Water Board on September 23, 2014. The Small Domestic Systems Order regulates the discharges from small domestic wastewater treatment and disposal systems discharging at a monthly average flow rate of 100,000 or less gallons per day. It does not include coverage for small industrial wastewater discharges.

### V. Title 22 Setbacks

CCR, title 22, division 4, chapter 3, section 60310, et seq. includes required horizontal setback distance for irrigation using recycled water. The Small Industrial Order incorporates two of these setbacks due the relative similarity between the water referenced in those setbacks, disinfected tertiary recycled water, and the water from treatment systems regulated by the Small Industrial Order, which does not need to be disinfected.

#### A. Land Application

"No irrigation with disinfected tertiary recycled water shall take place within 50 feet of any domestic water supply well unless all of the following conditions have been met:"

- "A geological investigation demonstrates that an aquitard exists at the well between the uppermost aquifer being drawn from and the ground surface."
- "The well contains an annular seal that extends from the surface into the aquitard."

- "The well is housed to prevent any recycled water spray from coming into contact with the wellhead facilities."
- "The ground surface immediately around the wellhead is contoured to allow surface water to drain away from the well."
- "The owner of the well approves of the elimination of the buffer zone requirement."

### B. Impoundment

"No impoundment of disinfected tertiary recycled water shall occur within 100 feet of any domestic water supply well."

# VI.California Plumbing Code

The 2016 California Plumbing Code (Plumbing Code) contains setbacks for private sewage disposal systems in Appendix H as Table H 101.8. This table is applicable as a requirement for disposal of sewage, defined in the Plumbing Code as liquid waste containing animal or vegetable matter in suspension or solution and that may include liquids containing chemicals in solution. The industrial wastewater regulated in the Small Industrial Order does not fit this definition of sewage. However, some of the setbacks in the Small Industrial Order are based on those contained in Table H 101.8 and are incorporated based on the water quality protectiveness of the setbacks.

# VII. California Well Standards

The Division of Water Resources has established horizontal separation distances for water well siting from sources of domestic and industrial contamination. The California Well Standards, part II, section 8 (California Well Standards) lists the minimum horizonal separation from municipal wells and known or potential sources of pollution or contamination including but not limited to sanitary, storm, and industrial sewers, septic tanks and leach fields, and sewage and industrial waste ponds. Separation distances established by the California Well Standards are not adequate for every condition. Determination of the safe separation distance for individual wells requires detailed evaluation of existing and future site conditions. The California Well Standards were used as a starting basis for some of the well setbacks identified in the Small Industrial Order, as siting criteria may apply to both domestic and industrial sources of contamination.

# VIII. Basin Plan

The *Water Quality Control Plan for the Lahontan Region*, March 31, 1995 (the Basin Plan), references State Water Board plans and policies, contains beneficial use designations and water quality objectives for waters of the Lahontan Region, contains programs of implementation to achieve water quality objectives, and provides a strategy for protecting beneficial uses of surface and ground waters throughout the Lahontan Region. The Small Industrial Order implements the Basin Plan, including amendments adopted since 1995.

#### A. Discharge Prohibitions

Water Code section 13243 grants the Regional Water Board the authority to specify certain conditions or areas where the discharge of waste, or certain types of waste will not be permitted. These prohibitions and exemptions exist in Section 4.1 of the Basin Plan.

#### B. Beneficial Uses

Existing and potential beneficial uses of groundwater for named groundwater basins in the Lahontan Region include municipal and domestic supply (MUN), agricultural supply (AGR), industrial service supply (IND), fresh water recharge (FRSH), aquaculture (AQUA) and wildlife habitat (WILD). Groundwaters that are not part of the named basins have the MUN designation in accordance with the Basin Plan and with the State Water Board's Sources of Drinking Water Policy contained in <u>State Water</u> <u>Board Resolution No. 88-63</u>.

Chapter 2 in the Basin Plan includes beneficial use designations for any specific groundwater basin.

#### C. Chemical Constituents

The Basin Plan requires, "Ground waters shall not contain concentrations of chemical constituents that adversely affect the water for beneficial uses." Waters designated as MUN shall not contain concentration of chemical constituents in excess of the maximum contaminant level (MCL) or secondary maximum contaminant levels (SMCL) as specified in Title 22 of the California Code of Regulations and incorporated into the Basin Plan.

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

## BOARD ORDER NO. R6T-2020-<mark>(TENTATIVE)</mark> GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL INDUSTRIAL WASTEWATER TREATMENT SYSTEMS

### **ATTACHMENT 2: REPORT OF WASTE DISCHARGE**

## BACKGROUND

The ROWD outline presented below is intended to provide an organized list of information needed from applicants. Not all elements of the ROWD outline are applicable to each category of the Small Industrial Order. Applicants should review the outline and the description of each category, located within the findings of the Small Industrial Order, to determine which elements are needed for their facility.

Organizing the technical report as described in this attachment will allow streamlined review of the facility information, thus expediting the permitting process, and may reduce the time required to prepare an NOA.

Contacting Lahontan Water Board Staff to discuss the project before preparing the ROWD is encouraged and may help with the ROWD development process. Providing as much of the report of waste discharge (report requirements are contained in Attachment 2-B) in rough draft form, as possible, will allow Lahontan Water Board staff to provide guidance in completing the application-required documents.

# OUTLINE

# I. Fee

# II. Form 200

# **III. Facility Information**

## A. Wastewater system overview

ROWD Number	ROWD Element	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
	Provide a site location map		
	<ul> <li>Location of wastewater system buildings</li> </ul>		
1.	Wastewater treatment system components	Yes	Yes
	Groundwater wells		
	Surface water bodies		
2.	Provide a site plan	Yes	Yes
	Provide the site location		
3.	<ul> <li>Assessor's Parcel Number(s)</li> </ul>	Yes	Yes
	GPS Coordinates (Latitude and Longitude)		
4.	Provide depth to groundwater	Yes	Yes

#### B. Service area overview

ROWD Number	ROWD Element	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
5.	<ul> <li>Describe the proximity of the wastewater system to the boundaries of a centralized wastewater district or regional service area.</li> <li>If nearby, then discuss why connection to the regional system is infeasible.</li> <li>If within the boundary, then provide written documentation of an attempt to connect and provide evidence that connection to the system was not approved or infeasible</li> </ul>	Yes	Yes
6.	<ul> <li>Describe the wastewater collection system.</li> <li>Age and condition of collection system.</li> <li>Piping construction and layout (show on the site location map).</li> <li>Lift stations and backup pumping systems.</li> <li>Failure warning system.</li> <li>Inflow and infiltration (I/I) estimates (and any control that is necessary).</li> <li>Maintenance of collection system and spill response.</li> </ul>	Yes	Yes
7.	<ul> <li>Describe storm water collection system</li> <li>Storm water collection area (show on map).</li> <li>Storm water disposal area in relation to wastewater disposal area.</li> <li>Storm water disposal permit (if needed).</li> </ul>	Yes	Yes

# **IV.Wastewater Characterization and Treatment**

#### A. Wastewater type

ROWD Number	ROWD Element	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
8.	Describe the activities generating wastewater (e.g., cannabis cultivation, industrial activity, water treatment, etc.).	Yes	Yes
9.	<ul> <li>Describe wastewater flow rate</li> <li>How the flow rate was determined.</li> <li>Any special events or seasonal variations that cause high wastewater flow rates or other sources of wastewater (e.g. swimming pool filter, potable water treatment backwash water, irrigation during cultivation season, etc.).</li> </ul>	Yes	Yes

#### B. Wastewater characterization.

ROWD Number	ROWD Element	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
10.	<ul> <li>Characterize untreated wastewater influent quality</li> <li>Biochemical oxygen demand (BOD)</li> <li>Total dissolved solids (TDS)</li> <li>Nitrogen</li> <li>Electrical conductivity</li> <li>Sodium</li> <li>Chloride</li> <li>Specific constituents of concern as needed based on site activities.</li> <li>Characterize wastewater for potential constituents designated in California Code of Regulations, title 27, division 2, Subdivision 1, section 20090, et seq (Title 27).</li> </ul>	No	Yes
11.	<ul> <li>Characterize (predicted) treated wastewater effluent quality</li> <li>BOD</li> <li>TDS</li> <li>Nitrogen</li> <li>Specific constituents of concern as needed.</li> </ul>	No	Yes

## C. Wastewater treatment system overview

ROWD	ROWD Element	Applicable to	Applicable to
Number		Evaporative	Infiltrative
		Disposal	Disposal
		Category	Category
12.	Provide a wastewater treatment system schematic	Yes	Yes

ROWD Number	ROWD Element	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
13.	<ul> <li>Describe waste interception, pretreatment, and treatment</li> <li>Activities (e.g. septic tank effluent pump system, grease traps, screening, comminution, grit removal, remove settleable/floatable matter, etc.).</li> <li>Technologies (e.g., activated sludge, membrane biological reactor, aerated lagoon, oxidation ditch, Imhoff tank, septic tank, etc.) with engineered design capacity in description.</li> <li>Residuals storage, treatment, and disposal.</li> <li>Size and location of equipment (e.g. septic tank volume, package treatment plant, membrane biological reactor, pond size include acreage and storage capacity, pond liners, and number and horsepower of aerators, etc.).</li> </ul>	Yes	Yes
14.	<ul> <li>Describe storage facilities (if applicable)</li> <li>The size and location of wastewater storage ponds, including a map showing all the ponds and describe them as lined or not.</li> <li>The materials, age, and condition of any liners.</li> </ul>	Yes	Yes
15.	Describe proposed disposal method for treated effluent (e.g., leach field, percolation pond, etc.).	Yes	Yes
16.	Describe proposed disposal area: acreage, surrounding land use, depth to groundwater, and the proximity of drainage ways, surface waters, and municipal, industrial, or agricultural wells.	Yes	Yes
17.	<ul> <li>Describe planned operation and maintenance</li> <li>Routine operation and maintenance procedures.</li> <li>Treatment operator training and qualifications requirements.</li> <li>Contingency plans for repairs/spills/treatment issues.</li> </ul>	Yes	Yes

#### D. Disposal system water balance

ROWD Number	ROWD Element	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
18.	Calculate safety factors to avoid overtopping or surfacing	Yes	Yes
19.	<ul> <li>Calculate precipitation rate using rainfall depth duration frequency data, such as from the following:</li> <li>the Department of Water Resources Internet web page: http://ferix.water.ca.gov/webapp/precipitation/</li> <li>the NOAA Atlas 14 Volume 6: https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html</li> </ul>	Yes	Yes
20.	Calculate evaporation rate using local evapotranspiration rates	Yes	Yes
21.	Provide a copy of the report, if a site-specific investigation is used.	Yes	Yes
22.	<ul> <li>Report disposal area infiltration values</li> <li>Site-specific percolation tests</li> <li>Application rates</li> <li>Other sources as needed to support the calculation</li> <li>Information sources used.</li> </ul>	No	Yes

### **V. SUPPLEMENTAL REPORTS**

#### A. Erosion Control Plan

The erosion control plan is only required for facilities containing a surface impoundment structure.

ROWD	ROWD Element	Applicable to	Applicable to
Number		Evaporative	Infiltrative
		Disposal	Disposal
		Category	Category
23.	Describe maintenance monitoring and associated repairs of any	Yes	Yes
	irregularities around the perimeter of the water surface.	Tes	

#### B. Sludge Management Plan

The sludge management plan is only required for sludge generating treatment systems and describes handling and disposal of sludge.

ROWD Number	ROWD Element	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
24.	Estimate the amount of sludge and scum that will be generated.	Yes	Yes
25.	Characterize solids using EPA Toxicity Characteristic Leaching Procedure (TCLP) and California Total Threshold Limit Concentration (TTLC) before disposing offsite.	Yes	Yes
26.	Describe cleaning of digesters or storage vessels and the treatment and disposal of the residuals.	Yes	Yes
27.	Describe how sludge, scum, and supernatant will be stored and disposed of to protect groundwater quality.	No	Yes
28.	Describe the treatment and storage requirements, if sludge will be subject to further treatment.	No	Yes
29.	Describe how that will be performed to prevent nuisance odors, prevent vectors, and protect groundwater quality, if drying of residuals is planned.	No	Yes

#### C. Emergency Response Plan

The emergency response plan is required for all systems and describes operation and maintenance activities to prevent accidental and/or unauthorized discharges of wastewater, and to effectively respond to such releases, minimizing the environmental impact.

ROWD Number	ROWD Element	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
30.	Describe wastewater treatment equipment, operational controls, flow measurement and calibration procedures, and treatment system schematic including valve/gate locations.	Yes	Yes
31.	Describe sludge handling equipment, operational controls, and disposal procedures.	Yes	Yes
32.	Describe collection system cleaning and maintenance, equipment tests, and alarm functionality tests to minimize the potential for wastewater spills originating in the collection system or headworks. For collection systems subject to State Water Board Order No. 2006-0003-DWQ, reports prepared to comply with the State Water Board Order No. 2006- 0003-DWQ satisfy this requirement.	Yes	Yes
33.	Specify emergency response procedures including emergencies such as power outage, severe weather, flooding, or inadequate freeboard (for systems with surface impoundment structures). This includes an equipment and telephone list for contractors/consultants, emergency personnel, and equipment vendors.	Yes	Yes
34.	Specify coordination procedures with fire, police, California Governor's Office of Emergency Services (CalOES), Lahontan Water Board, and local county health department personnel.	Yes	Yes

#### D. QA/QC Document

The QA/QC document is required for any surface impoundment structure and includes construction and operation specifications for correctly installing liners to contain any leaks.

ROWD Number	ROWD Element	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
35.	Describe subgrade preparation	Yes	Yes
36.	Specify inspection frequencies for liner construction	Yes	Yes
37.	Describe testing specifications for both destructive testing and non- destructive liner testing	Yes	Yes
38.	Describe qualifications for the construction inspector.	Yes	Yes

#### E. Protected Species Document

ROWD Number	ROWD Element	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
39.	Demonstrate the project will not adversely impact species identified as a candidate, sensitive, or special status species (protected species) in local or regional plans, policies, or regulation, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife (USFW).	Yes	Yes
40.	Provide verification from the California Natural Diversity Data Base (CNDDB), or equivalent.	Yes	Yes

#### F. Cultural Resources Document

ROWD Number	ROWD Element	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
41.	Demonstrate that a California Historical Resources Information System (CHRIS) records search, or equivalent, occurred.	Yes	Yes

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

# BOARD ORDER NO. R6T-2020-<mark>(TENTATIVE)</mark> GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL INDUSTRIAL WASTEWATER TREATMENT SYSTEMS

## ATTACHMENT 3: MONITORING AND REPORTING PROGRAM FRAMEWORK

## BACKGROUND

A monitoring and reporting program (MRP) is issued for every permittee whose discharge is covered by the Small Industrial Order or any other order of waste discharge requirements pursuant to Water Code section 13267. Water Code section 13267 states, in part:

In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports.

#### Water Code section 13268, building from section 13267, states, in part:

(a) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).

(b)(1) Civil liability may be administratively imposed by a regional board in accordance with article 2.5 (commencing with section 13323) of chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.

An MRP created for a permittee covered by the Small Industrial Order describes requirements for monitoring the discharge regulated by the Small Industrial Order and reporting the results of the monitoring to the Lahontan Water Board to ensure compliance with the Small Industrial Order discharge requirements. This attachment contains guidance for developing such an MRP, which is specific to the individual permittee. The MRP reflects site-specific conditions and is issued as part of the notice of applicability (NOA).

The permittee must follow the MRP unless a revised MRP is issued by the Lahontan Water Board Executive Officer (Executive Officer). The results of any monitoring done more frequently than required by an MRP must be reported in the next regularly scheduled monitoring report. Values obtained through additional monitoring must be used in calculations as appropriate.

# **GENERAL COMPONENTS**

## I. Reporting Project Status

The monitoring and reporting program (MRP) requires information on the status of facility upgrade and improvement projects. When specified, the permittee must provide updated status of these projects with each submitted report.

### **II. Sampling Method**

All samples must be representative of the volume and nature of the discharge or matrix of material sampled. The name of the sampler, sample type (grab or composite), time, date, location, bottle type, and any preservative used for each sample must be recorded on the sample chain of custody form. The chain of custody form must also contain all custody information including date, time, and to whom samples were relinquished. If composite samples are collected, the basis for sampling (time or flow weighted) must be approved by Lahontan Water Board staff.

Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used if they are also used by a State Water Board California Environmental Laboratory Accreditation Program certified laboratory, or:

- The user is trained in proper use and maintenance of the instruments.
- The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer.
- Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency.
- Field calibration reports are maintained and available for at least three years.

## **III. Reporting Method**

The Regional Water Board has transitioned to a paperless office system Permittees must submit reports (both technical and monitoring reports) to a digital database, specified in the NOA, such as the State Water Board's Geotracker database in portable document format (pdf). Analytical data must be uploaded to the same database under a site-specific global identification number. The following link has information on the GeoTracker database.

# **IV.Certification**

A letter transmitting the monitoring reports must accompany each report. The letter must report all violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. The transmittal letter must contain the following penalty of perjury statement and must be signed by the permittee or the permittee's authorized agent:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

### V. Treatment and Disposal System MRP Framework

Wastewater treatment methods may vary by site, and available technologies are expected to evolve with time. BPTCs may include aerobic treatment systems, sand/media filters, package treatment plants, constructed wetlands, activated sludge, membrane biological reactors, and disinfection systems. The following monitoring and reporting program framework for treatment systems has been generalized with the intent to not limit the selection of alternatives available to the wastewater system designer.

Best practicable treatment or controls (BPTCs) are selected based on wastewater, treatment system, site conditions, and the overall perceived threat to water quality. A specific MRP is developed based on the BPTCs implemented in the treatment system, which inform the frequency, constituents, and location of proposed site-specific monitoring.

All treatment systems are monitored to ensure compliance with numerical and narrative effluent limitations. This includes the requirement to not contain trace elements, pollutants or contaminants, or combinations thereof, in concentrations that are toxic or harmful to humans or to aquatic or terrestrial plant or animal life. For discharges designated as Infiltrative Disposal Category as described in Finding II.A., any constituent reported in the ROWD matching that requirement must be monitored.

The following contains a conceptual framework of basic monitoring and reporting program needs for the treatment and disposal system.

## A. Facility Monitoring

MRP Frame Number	MRP Frame Element	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
1.	The permittee must inspect their facility quarterly or at other appropriate intervals for any maintenance needs, including vector mitigation features (e.g., fencing, netting).	Yes	Yes
2.	The permittee must have a device to measure wastewater flow.	Yes	Yes
3.	The permittee must measure and record average daily average and peak flows. Flow rate may be metered or estimated based on potable water supply meter readings or other approved method.	Yes	Yes
4.	The permittee must establish an influent sample point that provides representative samples of the wastewater quality.	No	Yes
5.	The permittee must establish an effluent sample collection point that represents the effluent quality distributed to the disposal area. This is generally the effluent from the last treatment unit of the treatment process.	No	Yes
6.	<ul> <li>The permittee must collect effluent grab samples on a quarterly basis and analyze each sample for the following constituents:</li> <li>Biochemical oxygen demand (BOD), 5 day 20°C, as milligrams per liter</li> <li>Total dissolved solids (TDS) as milligrams per liter</li> <li>Total nitrogen as milligrams per liter</li> <li>Other constituents as needed and based on the ROWD, to ensure effluent limit compliance</li> </ul>	No	Yes

#### B. Groundwater Monitoring

A groundwater monitoring program may also be applicable and may be required when there is concern for groundwater degradation.

MRP Frame Number	MRP Frame Element	Applicable to Evaporative Disposal	Applicable to Infiltrative Disposal
	The permittee must collect representative groundwater grab samples (up	Yes	Yes
	and down gradient within the aquifer(s) of concern) on a quarterly basis and analyze each sample for the following constituents.		
7.	<ul> <li>Biochemical oxygen demand (BOD), 5 day 20°C, as milligrams per liter</li> </ul>		
	Total dissolved solids (TDS) as milligrams per liter		
	Total nitrogen as milligrams per liter     The permittee must measure and record field parameters with each		
	sample event. The field parameters are determined after well purging and	Yes	Yes
	before well sampling.		
	Electrical conductivity (EC) as microseconds per centimeter		
0	Acidity/basicity as pH		
8.	Temperature as degree Fahrenheit or Celsius		
	Turbidity as Nephelometric Turbidity Unit		
	Dissolved oxygen as milligrams per liter		
	Oxidation reduction potential as millivolts		
	Groundwater depth as feet, rounded to the nearest 0.1 feet		

# C. General Reporting

MRP Frame Number	MRP Frame Element	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
9.	The permittee must include, as applicable, the copies of sludge disposal records including date and gallons in reports	Yes	Yes

MRP Frame Number	MRP Frame Element	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
10.	The permittee must include a narrative description of all operation and maintenance inspections and activities completed during the reporting period	Yes	Yes
11.	The permittee must include flow monitoring results in reports	Yes	Yes
12.	The permittee must submit annual reports for the period beginning January 1 and ending December 31 on February 1 of the following year.	Yes	No
13.	<ul> <li>The permittee must include a work plan (signed by a California licensed professional civil engineer) for any identified maintenance needs. The permittee must report the following information for each maintenance project: <ul> <li>Name of the project</li> <li>Project description</li> <li>Project purpose</li> <li>Scheduled start construction date</li> <li>Scheduled end construction date</li> <li>Scheduled attainment of operation date</li> </ul> </li> <li>Reason for changes in scheduled dates from the previous report</li> </ul>	Yes	Yes
14.	<ul> <li>The permittee must submit quarterly reports according to the following schedule:</li> <li>The January 1 to March 31 report is due by May 1 of the same year</li> <li>The April 1 to June 30 report is due by August 1 of the same year</li> <li>The July 1 to September 30 report is due by November 1 of the same year</li> <li>The October 1 to December 31 report is due by February 1 of the following year</li> </ul>	No	Yes

MRP Frame Number	MRP Frame Element	Applicable to Evaporative Disposal Category	Applicable to Infiltrative Disposal Category
15.	<ul> <li>The permittee must include the following for each grab sample:</li> <li>Change of custody forms</li> <li>Laboratory reports for each constituent monitored</li> <li>The location of each effluent sample</li> <li>Comparison of collected data with any numerical effluent limitations established in the Order</li> <li>Statement whether any effluent limitation is exceeded</li> </ul>	No	Yes