



# Lahontan Regional Water Quality Control Board

July 25, 2025

WDID No. 6B260300002

TO: ATTACHED MAILING LIST

# Closure and Post-Closure Waste Discharge Requirements for Benton Crossing Landfill and Sludge Landfarm, Mono County

Enclosed are tentative Waste Discharge Requirements for the subject line facility, located in Mono County. The Lahontan Regional Water Quality Control Board (Lahontan Water Board) requests that you review the enclosed documents and provide us with your written comments no later than <a href="mailto:August 26">August 26</a>, <a href="mailto:2025">2025</a>. Please send your comments to the Lahontan Water Board's email address at <a href="mailto:Lahontan@waterboards.ca.gov">Lahontan@waterboards.ca.gov</a> and include <a href="mailto:Benton Crossing Landfill WDID No.6B260300002 Comments">Comments</a> in the subject line text. If you do not have access to the internet, you may mail your comments to the Lahontan Water Board's Victorville office at the address shown on this letter to the attention of Andrew Robinson.

The Lahontan Water Board will consider adopting the Closure and Post-Closure Waste Discharge Requirements at its regular meeting scheduled for August 28, 2025. As required by the California Code of Regulations, title 27, section 21730, notice of the meeting and the enclosed documents are circulated not less than 45 days before the scheduled meeting. You can view the Lahontan Water Board's meeting agenda 10 days before the meeting on our web site at: <a href="https://www.waterboards.ca.gov/lahontan">www.waterboards.ca.gov/lahontan</a> (click on Agenda). If you need further information regarding this meeting, please contact our office at (760) 241-6583.

If you need further information regarding this agenda item, please contact Andrew Robinson, Engineering Geologist at (760) 243-2444 or at andrew.robinson@waterboards.ca.gov or Christina Guerra, Senior Engineering Geologist at (760) 241-7333 or christina.guerra@waterboards.ca.gov.

Enc: Tentative Closure and Post-Closure Waste Discharge Requirements and Monitoring and Reporting Program for Benton Crossing Class III Landfill and Sludge Farm

Essra Mostafavi, chair | Ben Letton, executive Officer

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

# BOARD ORDER NO. R6-2025-TENTATIVE WDID NO. 6B260300002

#### CLOSURE AND POST-CLOSURE WASTE DISCHARGE REQUIREMENTS

#### FOR

# MONO COUNTY DEPARTMENT OF PUBLIC WORKS BENTON CROSSING CLASS III LANDFILL AND SLUDGE LANDFARM

Mono County

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

### 1. Discharger

The Mono County Department of Public Works (Mono County) operates the Benton Crossing Class III Landfill (Landfill) and Sludge Landfarm (Landfarm). The City of Los Angeles, Department of Water and Power (landowner [LADWP]) owns the land the Landfill and Landfarm are located on and leases that land to Mono County. For the purposes of this Order, Mono County (operator) and the LADWP (landowner) are referred to as the "Discharger."

On July 30, 2021, the Discharger submitted a Final Closure/Post-Closure Maintenance Plan (FCPCMP). The information in the FCPCMP constitutes a complete Report of Waste Discharge (ROWD), and contains the applicable information required in title 27 of the California Code of Regulations (CCR).

#### 2. Location

Benton Crossing Landfill and former Landfarm (Facility) are located at 899 Pit Road, Crowley Lake, Mono County, within Section 16, Township 3 South, Range 29 East, Mount Diablo Baseline and Meridian. Attachment A of this Order shows the Facility location.

#### 3. Facility

The Facility is a 147.55-acre site consisting of a Class III municipal solid waste (MSW) landfill and sludge Landfarm. The landfill encompasses 70.62-acres and is unlined with no leachate collection and recovery system (LCRS). The landfill stopped receiving waste in December 2022. Discharge to the former Landfarm, a 3.5-acre waste disposal area in the southwestern corner adjacent to the landfill, ceased in September 2021. The former Landfarm was cleaned-closed in June 2023. For the purposes of the Order, the landfill is also referred to as Waste

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Management Unit (WMU) or "Landfill." A map of the Facility is included as Attachment B, which is made part of this Order.

# 4. Reason for Action

Mono County submitted a Final Closure and Post-Closure Maintenance Plan (FCPCMP) in July 2021 constituting a ROWD. The FCPCMP included a work plan to construct a final cover over the Landfill and clean-close the Landfarm. The FCPCMP describes the manner that the Landfill was closed in December 2022, as well as the maintenance plan of the Facility for the duration of the post-closure period. The Lahontan Water Board is rescinding Board Order No. 6-96-156 and issuing these Post-Closure Waste Discharge Requirements (WDRs) and updating the Monitoring and Reporting Program (MRP) to: (1) document closure of the Landfill and Landfarm; (2) establish the post-closure maintenance and monitoring period and requirements for the Facility; and (3) provide general updates to the WDRs and MRP based on current site conditions, in compliance with title 27 of the California Code of Regulations.

### 5. Order History

- a. On November 12, 1987, the Lahontan Water Board adopted Board Order No. 6-87-140, establishing WDRs for the Facility.
- b. On September 9, 1993, the Lahontan Water Board adopted Board Order No. 6-93-100, amending the WDRs to incorporate the requirements of 40 Code of Federal Regulations, Parts 257 and 258 (Subtitle D), as implemented in the State of California under State Water Resources Control Board (State Water Board) Resolution No. 93-62.
- c. On September 14, 1995, the Lahontan Water Board adopted Board Order No. 6-87-140A1, amending the WDRs to include requirements to include a time schedule for compliance with State and Federal regulations.
- d. On November 8, 1996, the Lahontan Water Board adopted Board Order No. 6-96-156, revising the WDRs requiring the Discharger to comply with State regulations.

#### 6. Climate

The climate of the area is characterized by wet winters and dry summers. Precipitation primarily occurs from November through March. The average annual rainfall is approximately 14.5 inches. The average annual snowfall is approximately 90 inches. The average temperature is 48 degrees Fahrenheit (°F) and ranges to an average high temperature in the summer of 69°F. The estimated 100-year/24-hour precipitation event for the Facility is approximately 5.84 inches. The estimated 1000-year/24-hour precipitation event is 8.50 inches. The average annual pan evaporation rate is up to 70 inches. The prevailing wind direction is from the southwest.

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# 7. <u>Land Uses</u>

The Landfill property is designated as Public Facilities (PF), in the Land Use Element of the County General Plan (explicitly allowing the solid waste landfill). The property surrounding the Benton Crossing Landfill is either owned by LADWP, or owned by the United States Department of Agriculture, Bureau of Land Management (BLM). Land use designations are: Open Space (OS), and Resource Management (RM). The surrounding land is undeveloped with the exception of access roads. There are no inhabited structures within 1,000 feet of the Facility.

# 8. Site Topography

The Facility is situated on a topographic high formed by erosion of Pleistocene lakebed sediments, on a terrace approximately 30 feet higher than the surrounding, relatively flat, basin geomorphology. The elevation ranges from approximately 6,890 to 6,930 feet above mean sea level.

#### 9. <u>Site Geology</u>

The Facility is located within the Eastern California Shear Zone, the eastern portion of the Long Valley Caldera, between the Sierra Nevada Mountains to the west and Glass Mountain Range to the east and northeast. Approximately, 0.7 million years ago and estimated 125 cubic miles of material was extruded depositing the Bishop Tuff and creating the Long Valley Caldera. The Long Valley Caldera is structurally bordered on the west by the northwest-trending Hilton Creek, Laurel Convict, and Hartley Springs Faults and on the east by a concentric series of Holocene faults associated with subsidence within the caldera. The Facility is not located within a currently designated Alquist-Priolo Special Studies Zone. The closest Holocene fault to the Landfill are splays of the Hilton Creek Fault where the northwest-trending fault enters the Long Valley Caldera, approximately 3 miles southwest of the Landfill.

The Facility is underlain by Quaternary sedimentary deposits, increasing in fines content with depth. The silts, clays, and fine sands are lacustrine sediments that formed within the Pleistocene Long Valley Lake. Subsequent draining of the lake resulted in the deposition of fluvial sequences of sand and gravel. The presence of flow deformation features within the fine-grained sediments are thought to be a result of earthquakes during lacustrine sediment deposition. Sediments are classified as gravelly silty sand from the surface to as deep as 30-feet below ground surface (bgs), underlain by interbedded sandy silt and sandy clay from as shallow as 10-feet bgs, based on depths explored. In the soil borrow area, there are two distinct sediments present, a poorly graded gravel with silt and sand and poorly graded sand with silt.

# 10. Regional Hydrology

Big Alkali Lake is located approximately one eighth mile south of the Facility, and

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flows into Little Alkali Lake, located approximately one mile southwest of the Facility. Both lakes are fed by springs and drain to Owens River, which is located approximately one mile east of the Facility.

# 11. <u>Hydrogeology and Groundwater Quality</u>

The Facility is within the Long Hydrologic Area of the Owens Hydrologic Unit. All surface water that enters the region either infiltrates into the groundwater basin, evaporates, or flows overland into the Owens River. There is no perennial surface water flow at the site; topographic conditions preclude surface water run-on.

The receiving groundwater beneath this Facility is the Long Valley Groundwater Basin. To assess the groundwater conditions beneath the Landfill, seven groundwater monitoring wells have been installed: two upgradient of the existing Facility, and five downgradient/cross-gradient. Based on groundwater elevation data collected from these wells, groundwater occurs beneath the Facility at depths ranging from 22 to 35 feet below ground surface. Unconfined groundwater typically occurs in unconsolidated alluvial and fluvial deposits from 16 feet to 35 feet bgs. Groundwater flow direction is generally to the northeast, east direction with a horizontal hydraulic gradient of approximately 0.004 to 0.014 feet per foot.

The Discharger has been monitoring groundwater beneath the site since 1987. The analytical data from the seven groundwater monitoring wells installed at the Facility indicate that low concentrations of volatile organic compounds (VOCs) and elevated concentrations of inorganic constituents have been detected in groundwater beneath the site sporadically since 1997. Groundwater data shows VOCs are primarily detected in MW-2 and MW-6 and are tetrachloroethene (PCE), 1,1-dichloroethene, 1,4-dichlorobenze, benzene, and cis-1,2dichloroethene. Inorganic constituents are primarily detected in MW-5 and MW-6 and include chloride, sulfate, nitrate, and total dissolved solids (TDS).

#### 12. Waste Management Unit Classification and Authorized Disposal Sites

Pursuant to CCR, title 27, section 20260, the Landfill is classified as a Class III WMU and was authorized to accept nonhazardous and inert solid wastes including municipal solid waste (MSW). The Landfarm was authorized to accept sewage sludge from the Mammoth Lakes Community Water District. The Landfill is defined as an MSW landfill in pursuant to CCR, title 27, section 20250.

### 13. Waste Classification

The waste that was discharged to the Landfill is defined in CCR, title 27, sections 20220 and 20230, as non-hazardous and inert solid waste, respectively. The sewage sludge that was discharged to the Landfarm for aeration treatment was classified as nonhazardous solid waste in accordance CCR, title 27, section 20220.

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#### 14. Subtitle D Submittal Status

Subtitle D requirements became effective for this Landfill on April 9, 1994. Board Order Nos. 6-93-100, 6-87-140A1, and 6-96-156 required the submittal of several items in order to comply with Subtitle D for the Landfill. The Discharger submitted complete information regarding the acceptance of liquids, the existing waste footprint, the distance from the Landfill to the nearest drinking water source, whether the Landfill is in a 100-year floodplain or a wetland, and Water Quality Protection Standard (WQPS). These items fulfilled the submittal requirements of Subtitle D, as implemented by State Water Board Resolution No. 93-62.

# 15. Final Closure and Post-Closure Maintenance Plan

This Order approves the FCPCMP dated August 30, 2021, which describes the proposed manner of closure for the Landfill and Landfarm, and the proposed monitoring and maintenance during the post-closure period. The components and systems of the final closure include final grading, construction of the final cover, construction of drainage and erosion control systems, landfill gas monitoring, groundwater monitoring, Facility access roads, site security, and structure removal. Attachment C of this Order is a schematic of the closed Facility showing the extent of the closed WMU, former Landfarm, and waste receiving areas.

#### a. Landfill

The Discharger proposes an engineered alternative final cover for the Landfill, utilizing a linear low-density polyethylene (LLDPE) geomembrane. The constructed alternative final cover will consist of, from top to bottom, of the following components:

- 24-inch thick vegetative/protective cover layer including 3-inches of wood chips (erosion resistant);
- A 60- mil linear LLDPE Super Grip Net geomembrane with a 12-ounce (oz.) geotextile layer on top or a 60-mil double-sided textured LLDPE on top of 220 drainage geocomposite net with a 6-oz. geotextile on both sides; and
- 24-inch-thick foundation layer (1-foot placed as interim cover).

The Discharger will perform maintenance and monitoring on a periodic basis to maintain, as designed, the engineered alternative final cover of the Landfill throughout the post-closure period.

#### b. Landfarm

The Landfarm is approximately a 3.5-acre waste disposal area sited in the southwestern corner of the Facility. The Landfarm has been clean closed in accordance with CCR, title 27, section 20950(a)(2)(B). It is estimated that

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approximately 7,000 cubic yards (cy) of soil and residual sludge was removed and consolidated into the Landfill. The soil and residual sludge were incorporated into the foundational intermediate cover for the construction and demolition waste disposal fill area of the Landfill. Verification soil sampling is required to demonstrate clean closure.

# 16. Engineered Alternative to Prescriptive Landfill Cover Design

CCR, title 27, section 20080, subsection (b), allows for an engineered alternative landfill cover provided that the Discharger demonstrates that construction to the prescriptive standard is not feasible and that an engineered alternative is consistent with the performance goal of the prescriptive standard and affords equivalent protection against water quality impairment. For landfills, the performance goal for closure is to minimize the infiltration of water into the waste, thereby minimizing the production of leachate and landfill gas pursuant to CCR, title 27, section 20950, subsection (a)(2)(A)1.

Based on the results of the alternative final cover performance evaluation, as provided in the FCPCMP, the engineered alternative final cover system consisting of a 60-mil LLDPE liner and vegetated erosion-resistant layer is protective of water quality and meets the requirements of CCR, title 27, section 20080, subsection (b). This Order approves the engineered alternative final cover system.

# 17. Per- and Polyfluoroalkyl Substances

Per- and polyfluoroalkyl Substances (PFAS) is a family of more than 5,000 manmade and mostly unregulated chemicals. They are mobile (highly mobile in water), persistent, and bioaccumulative. They have very different physical and chemical properties and are resistant to degradation in the environment, and when degradation occurs, it often results in the formation of other PFAS compounds. The key classes of concern are perfluoroalkyl sulfonic acids such as long-chain perfluorooctanesulfonate (PFOS) and perfluorooctanic acid (PFOA). PFAS are manufactured globally and have been used in the production of a wide range of industrial (aerospace, automotive, fire-fighting foams [Aqueous Film-Forming Foams or AFFF1, and textile industries) and household products (non-stick products (e.g., Teflon TM, water repellant textiles, carpet, polishes, and cleaning products). Non-industrial PFAS sources include waste disposal facilities and wastewater treatment plants. People can be exposed to PFAS in various ways, including food, consumer products, and drinking water. Since these chemicals have been used in an array of consumer products, scientists have found PFAS compounds in the blood of nearly all people tested. Exposure through drinking water has become an increasing concern due to the tendency of PFAS to accumulate in groundwater.

Based on current available peer-reviewed studies on laboratory animals and epidemiological evidence in human populations, the USEPA has stated that studies conducted indicate that exposure to PFOA and PFOS over certain levels

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may result in adverse health effects.

The Lahontan Water Board is charged with the protection of the beneficial uses of water in the Lahontan Region, including water used or that could potentially be used as drinking water. If materials suspected of containing PFAS were/are used, released, or disposed of at the Benton Crossing Class III Landfill, then it is likely PFAS will be detected in the Facility's groundwater monitoring network. This Order requires the Discharger to perform a one-time sampling and reporting of PFAS concentrations as specified in MRP No. R6-2025-TENTATIVE.

# 18. Hazardous Waste Management

Solid waste is screened for household, commercial, and industrial hazardous waste. The Discharger implements measures to prevent the acceptance and disposal of hazardous wastes at the Landfill. Wastes received at the Facility are visually inspected to ensure that potentially hazardous materials are identified and removed from the waste stream. The visual inspection occurs at the gatehouse and at the active face. All hazardous waste identified from the visual inspections are placed in portable hazardous waste containers and move temporarily to the permitted hazardous waste storage locker for off-site disposal at an appropriate facility. The Facility has an active diversion program for inert materials, treated wood, cathode ray tubes, used automotive oil, drained used oil filters, and appliances. These items are collected and stockpiled in designated areas until a sufficient quantity has been accumulated for economic recycling offsite.

#### 19. Statistical and Non-Statistical Methods

Statistical and non-statistical analyses of monitoring data are necessary for the earliest possible detection of measurably significant evidence of a release of waste from the WMUs. CCR, title 27, section 20415, subdivision (e)(7), requires statistical data analyses to determine when there is "measurably significant" evidence of a release from the WMU. CCR, title 27, section 20415, subdivision (e)(8) allows non-statistical data analysis methods that can achieve the goal of the monitoring program at least as well as the most appropriate statistical method. The monitoring parameters listed in MRP No. R6-2025-TENTATIVE are used as indicators of a release from the Facility.

# 20. Water Quality Protection Standard

The WQPS consists of constituents of concern (COCs), concentrations limits, monitoring points, and the point of compliance. The COCs, monitoring points, and point of compliance for groundwater and unsaturated zone monitoring are described in MRP No. R6-2025-TENTATIVE, which is made part of this Order. The WQPS applies over the active life of the Landfill, closure and post-closure maintenance period, and the compliance period of the Facility in accordance with CCR, title 27, section 20410(a).

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# 21. Compliance Period

For MSW landfills, the compliance period is the number of years equal to the active life of the WMU plus a minimum of 30 years during the post-closure period in accordance with CFR, title 40, Part 258.61. The compliance period is the minimum period during which the Discharger must conduct a water quality monitoring program subsequent to a release from the Landfill. The compliance period must begin anew each time the Discharger initiates an evaluation monitoring program (EMP). The compliance period must extend as long as waste poses a threat to water quality pursuant to CCR, title 27, section 20950(a)(1), and CFR, title 40, Part 258.61(b)(2). The Landfill closed in December 2022; therefore, the compliance period is expected to end in 2053, but may be extended if the Facility is not in compliance with the WQPS. If the Discharger is engaged in a corrective action plan at the scheduled end of the compliance period, the compliance period shall be extended until the Discharger can demonstrate that the WMU has been in continuous compliance with its WQPS for a period of three consecutive years as specified in CCR, title 27, section 20410(c).

# 22. <u>Detection Monitoring Program</u>

Pursuant to CCR, title 27, section 20420, the Discharger has proposed a detection monitoring program (DMP) for the Facility. The DMP monitors groundwater and the unsaturated zone for evidence of waste constituent migration that may threaten groundwater quality. The DMP is specified in MRP No. R6-2025-TENTATIVE.

# 23. <u>Evaluation Monitoring Program</u>

An EMP is required, pursuant to CCR, title 27, section 20385 and section 20420, subdivision (k)(5-6), whenever there is "measurably significant" evidence of a release during a DMP or whenever there is significant physical evidence of a release. The Discharger must delineate the nature and extent of the release and develop a suite of proposed corrective action measures within 90 days of initiating an EMP, unless the Discharger proposes and substantiates a longer time period for implementing the EMP. If the EMP confirms measurably significant evidence and/or significant physical evidence of a release, then the Discharger must submit an Engineering Feasibility Study report proposing corrective action measures pursuant to CCR, title 27, section 20425 (k)(6), and MRP No. R6-2025-TENTATIVE.

#### 24. Corrective Action Program

A corrective action program to remediate releases from the Facility is required pursuant to CCR, title 27, section 20430 if results of an EMP confirm measurably significant evidence of a release or significant physical evidence of a release from the Facility.

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#### 25. Unsaturated Zone Monitoring

Unsaturated zone monitoring as part of the DMP for the Landfill began in 1988. Two interior landfill gas monitoring wells were installed; three additional landfill gas wells were installed in 1998. Interior landfill gas wells were installed to determine whether VOCs were present in the unsaturated zone separating buried waste and groundwater. All five wells were abandoned because they no longer provided relevant Point of Compliance information.

Currently, there are ten landfill (soil-pore) gas perimeter wells which are monitored quarterly for methane and VOCs, commonly detected constituents in landfill gas. The measured concentrations of soil-pore gas are variable between monitoring events, and there is no indication of increasing concentration trends.

#### 26. Storm Water

Due to local surface hydrology and the proximity to Waters of the United States, the Facility's industrial operations require coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharger Associated with Industrial Activities, NPDES No. CAS000001, Statewide Industrial General Permit, Order No. 2014-0057-DWQ.

# 27. Discharge of Monitoring Well Purge Water

As part of the regularly scheduled groundwater sampling events, groundwater monitoring wells are purged until parameters of electrical conductivity, pH, and temperature are sufficiently stabilized to ensure collection of a representative sample. Purged groundwater is currently discharged to the ground on-site and allowed to evaporate. To protect surface waters and groundwater, the discharge to the ground of purge water is prohibited from containing concentrations of COCs and monitoring parameters that exceed the WQPS, as described in MRP No. R6-2025-TENTATIVE.

#### 28. Financial Assurances

The Discharger has provided documentation that a financial assurance fund has been established for closure, post-closure maintenance, and potential future corrective action requirements. This Order requires the Discharger to report the amount of money available in the fund as part of the annual self-monitoring report. This Order also requires the Discharger to demonstrate, in an annual report, that the amount of financial assurance is adequate or to increase the amount of financial assurance, as appropriate, for inflation.

#### 29. Basin Plan

The Lahontan Water Board adopted a *Water Quality Control Plan for the Lahontan Region* (Basin Plan) on March 31, 1995, with subsequent amendments,. This Order implements the Basin Plan, as amended.

# 30. Receiving Waters

The receiving waters are the groundwaters of the Long Valley Groundwater Basin (Department of Water Resources, Groundwater Basin No. 6-11; Basin Plan,

Plate 2B) and minor surface waters of the Long Hydrologic Area (603.10) of the Owens Hydrologic Unit (603.00; Basin Plan, Plate 1B).

### 31. Beneficial Uses

The present and probable beneficial uses of the groundwaters of the Long Valley Groundwater Basin No. 6-11, as set forth and defined in the Basin Plan are:

- Municipal and Domestic Supply (MUN);
- b. Agricultural Supply (AGR);
- c. Industrial Service Supply (IND); and
- d. Freshwater Replenishment (FRSH).

The present and probable beneficial uses of minor surface waters of the Long Hydrologic Area No. 603.10, as set forth and defined in the Basin Plan are:

- a. Municipal and Domestic Supply (MUN);
- b. Agricultural supply (AGR);
- c. Ground Water Recharge (GWR);
- d. Water Contact Recreation (REC-1);
- e. Non-contact Water Recreation (REC-2);
- f. Commercial and Sportfishing (COMM);
- g. Cold Freshwater Habitat (COLD)
- Migration of Aquatic Organisms;
- Wildlife Habitat (WILD); and
- j. Spawning, Reproduction, and Development.

# 32. <u>Waste Management Strategy</u>

The Lahontan Water Board has determined that the waste discharged to the Landfill and Landfarm were consistent with a waste management strategy for pollution or contamination prevention of the water of the state, during the active life

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and continuing through closure and post-closure of the WMUs.

# 33. California Water Code, Section 13241 Considerations

Pursuant to the California Water Code (CWC), section 13241, the requirements of this Order take into consideration:

- a. Past, present, and probable future beneficial uses of water. This Order identifies existing groundwater quality and past, present, and probable future beneficial uses of water, as described in Finding Nos. 11 and 32, respectively. The proposed discharge will not adversely affect present or probable future beneficial uses of water including municipal and domestic supply, agricultural supply, industrial service supply, and freshwater replenishment, because there has been no indication of a release from the unlined Landfill, the current discharge is authorized only to lined WMUs, and monitoring is required to assess water quality.
- b. <u>Environmental characteristics of the hydrographic unit under consideration</u> <u>including the quality of water available thereto</u>. Finding No. 11 describes the environmental characteristics and quality of water available.
- c. Water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality in the area.

  Compliance with the requirements of this Order will protect groundwater quality. The Lahontan Water Board will use its existing authority and these WDRs to ensure protection of water quality from these discharges.
- d. <u>Economic considerations</u>. Water Quality Objectives established in the Basin Plan for the Long Valley Groundwater Basin do not subject the Discharger to economic disadvantage as compared to other similar discharges in the Region. This Order will require the Discharger to submit proposals compliant with the requirements of CCR, title 27, and is reasonable.
- e. <u>The need for developing housing within the region</u>. The Discharger is not responsible for developing housing within the region.
- f. <u>The need to develop and use recycled water</u>. The Discharger does not propose the use of recycled water at this Facility, as there is no locally available source.

#### 34. Human Right to Safe, Clean, Affordable, and Accessible 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 those uses of water. This Order promotes that policy by requiring storm water and drainage controls, monitoring to assess water quality, and corrective action to address impacts to

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water quality.

# 35. California Environmental Quality Act

The Mono County Department of Public Works is lead agency for purposes of the California Environmental Quality Act (CEQA) and filed a Notice of Exemption (NOE) for the closure of Benton Crossing Landfill pursuant to CCR, title 14, section 15062. The lead agency found the closure activities to be categorically exempt from CEQA, pursuant to CCR, title 14, section 15308, Actions by Regulatory Agencies for Protection of the Environment. The NOE was filed with the State Clearinghouse on February 3, 2025.

The Lahontan Water Board finds that the closure activities are categorically exempt from CEQA, pursuant to CCR, title 14, section 15304, Minor Alterations to Land.

#### 36. Antidegradation Analysis

State Water Board Resolution No. 68-16 ("Statement of Policy with Respect to Maintenance of High Quality Waters in California") 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 must be maintained. Any change in the existing high quality is allowed by that policy only if it has been demonstrated to the Lahontan Water Board 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. The policy further requires that Dischargers meet the WDR which will result in the best practicable treatment or control of the discharge necessary to assure that pollution or nuisance will not occur and that the highest water quality consistent with maximum benefit to the people of the state will be maintained.

Adequate liner systems, which comply with CCR, title 27 requirements, are needed to prevent an unauthorized release to groundwater and this WDR is expected to prevent degradation of water quality as a result of waste discharges. A monitoring and maintenance program is required to ensure that waste discharges are contained within the WMUs at the Facility. As a result, degradation is not expected.

### 37. Technical and Monitoring Reports

CWC, section 13267(b) provides that: "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 discharge or discharging, or who proposed to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who had discharged, discharges, or is suspected of having discharged or discharging, or who proposed to discharge

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waste outside of its region that could affect the quality of the waters of the state within its region must furnish, under penalty of perjury, technical or monitoring program reports which the board requires. The burden, including costs of these reports, must bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports."

Technical reports are necessary to ensure compliance with this Order and to assess any water quality impacts due to discharges from the Facility. Therefore, the burden, including costs, of these reports, bears a reasonable relationship to the need for the report and the benefits to be obtained from the reports.

# 38. Right to Petition

Any person aggrieved by this action of the Lahontan Water Board may petition the State Water Board to review the action in accordance with CWC, section 13320, and CCR, title 23, sections 2050 et. seq. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at

http://www.waterboards.ca.gov/public\_notices/petitions/water\_quality, or will be provided in hard copy or electronic format upon request.

#### 39. Notification of Interested Parties

The Lahontan Water Board notified the Discharger and interested agencies and persons of its intent to adopt revised WDRs for the authorized discharge of waste to the WMUs and has provided the public with an opportunity to submit written comments.

#### 40. Consideration of Interested Parties

The Lahontan Water Board, in a public meeting held on August 28, 2025, heard and considered all comments pertaining to the discharge.

**IT IS HEREBY ORDERED**, pursuant to CWC, sections 13263 and 13267, that the Discharger must comply with the following:

#### I. RECEIVING WATER LIMITATIONS

- A. The Discharger must not cause the presence of the following substances or conditions in groundwaters of the Long Valley Groundwater Basin.
  - 1. <u>Bacteria</u> Groundwaters designated as MUN, the median concentration of coliform organisms, over any seven-day period,

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must be less than 1.1 Most Probable Number per 100 milliliters (MPN/100 mL).

- 2. Chemical Constituents Groundwaters designated as MUN must not contain concentrations of chemical constituents in excess of the Primary Maximum Contaminant Level (MCL) or Secondary MCL based upon drinking water standards specified in the following provisions of CCR, title 22: Table 64431-A of section 64431 (Inorganic Chemicals), Table 64444-A of section 64444 (Organic Chemicals), Table 64449-A of section 64449 (Secondary MCLs Consumer Acceptance Contaminant Levels), and Table 64449-B of section 64449 (Secondary MCLs Consumer Acceptance Contaminant Level Ranges). This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect. Groundwaters must not contain concentrations of chemical constituents that adversely affect the water for beneficial uses.
- 3. Radioactivity Radionuclides must not be present in concentrations that are deleterious to human, plant, animal, or aquatic life, or that result in the accumulation of radionuclides in the food chain to an extent that it presents a hazard to human, plant, animal, or aquatic life. Groundwater designated MUN must not contain concentrations of radionuclides in excess of limits specified in CCR, title 22, section 64442, Table 64442, and section 64443, Table 64443, including future changes as the changes take effect.
- 4. Taste and Odors Groundwaters must not contain taste or odor-producing substances in concentrations that cause a nuisance or that adversely affect beneficial uses. For groundwaters designated as MUN, at a minimum, concentrations must not exceed adopted Secondary MCLs as specified in CCR, title 22, section 64449, Table 64449-A (Secondary MCLs Consumer Acceptance Contaminant Level) and Table 64449-B (Secondary MCLs Consumer Acceptance Contaminant Levels Ranges) including future changes as the changes take effect.
- 5. <u>Toxic Substances</u> Any presence of toxic substances in concentrations that individually, collectively, or cumulatively cause a detrimental physiological response in humans, plants, animals, or aquatic life is prohibited.
- B. The Discharger must not cause the presence of the following substances or conditions in surface waters of the Long Valley Hydrologic Area.
  - Ammonia The neutral, un-ionized ammonia species (NH3) is highly toxic to freshwater fish. The fraction of toxic NH3 to total ammonia

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species (NH4<sup>+</sup> + NH3) is a function of temperature and pH. Tables 3-1 to 3-4 from the Basin Plan were derived from USEPA ammonia criteria for freshwater. Ammonia concentrations must not exceed the values listed for the corresponding conditions in these tables. For temperature and pH values not explicitly in these tables, the most conservative value neighboring the actual value may be used or criteria can be calculated from numerical formulas available on page 3-4 of the Basin Plan.

2. <u>Bacteria</u> – E. coli. The bacteria water quality objective for all waters where the salinity is equal to or less than 1 part per thousand (ppth) 95 percent or more of the time during the CALENDAR YEAR is: a six-week rolling GEOMETRIC MEAN of *Escherichia coli (E. coli)* not to exceed 100 colony forming units (cfu) per 100 milliliters (mL), calculated weekly, and a STATISTICAL THREHOLD VALUE (STV) of 320 cfu/100 mL not be exceeded by more than 10 percent of the samples collected in a CALENDAR MONTH, calculated in a static manner.

United States Environmental Protection Agency (U.S. EPA) recommends using U.S. EPA Method 1603 or other equivalent method to measure culturable *E. coli*.

For additional information: State Water Resources Control Board California Environmental Protection Agency, Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California, Bacteria Provisions and a Water Quality Standards Variance Policy 2019 ISWEBE Bacteria Provisions.

- 3. <u>Biostimulatory Substances</u> Waters must not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect the water for beneficial uses.
- 4. <u>Chemical Constituents</u> Waters designated as MUN must not contain concentrations of chemical constituents in excess of the MCL or secondary MCL based upon drinking water standards specified in CCR, title 22, chapter 15, article 1, section 64400 et. seq. Waters designated as AGR must not contain concentrations of chemical constituents in amounts that adversely affect the water for beneficial uses (i.e., agricultural purposes). Waters must not contain concentrations of chemical constituents in amounts that adversely affect the water for beneficial uses.
- 5. <u>Chlorine, Total Residual</u> For the protection of aquatic life, total chlorine residual must not exceed either a median value of 0.002

- mg/L or a maximum value of 0.003 mg/L. Median values must be based on daily measurements taken within any six-month period.
- 6. <u>Color</u> Waters must be free of coloration that causes nuisance or adversely affects the water for beneficial uses.
- 7. <u>Dissolved Oxygen</u> The dissolved oxygen concentration, as percent saturation, must not be depressed by more than 10 percent, nor shall the minimum dissolved oxygen concentration be less than 80 percent of saturation. The minimum dissolved oxygen concentration must not be less than 4.0 mg/L as a daily minimum, 5.0 mg/L as a 7-day mean, and 6.5 mg/L as a 30-day mean.
- 8. <u>Floating Materials</u> Waters must not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect the water for beneficial uses. For natural high-quality waters, the concentrations of floating material must not be altered to the extent that such alterations are discernible at the 10 percent significance level.
- 9. Oil and Grease Waters must not contain oils, greases, waxes or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect the water for beneficial uses. For natural high-quality waters, the concentration of oils, greases, or other film or coat generating substances must not be altered.
- 10. Nondegradation of Aquatic Communities and Populations All waters must be free from substances attributable to wastewater or other discharges that produce adverse physiological responses in humans, animals, or plants; or which lead to the presence of undesirable or nuisance aquatic life. All waters must be free from activities that would substantially impair the biological community as it naturally occurs due to physical, chemical and hydrologic processes.
- pH Changes in normal ambient pH levels must not exceed 0.5 pH units. The pH must not be depressed below 6.5 nor raised above 8.5. Compliance with the pH objective for these waters will be determined on a case-by-case basis.
- 12. Radioactivity Radionuclides must not be present in concentrations which are deleterious to human, plant, animal, or aquatic life nor which result in the accumulation of radionuclides in the food web to an extent which presents a hazard to human, plant, animal, or aquatic life. Waters designated as MUN must not contain

concentrations of radionuclides in excess of the limits specified in CCR, title 22.

- 13. <u>Sediment</u> The suspended sediment load and suspended sediment discharge rate of surface waters must not be altered in such a manner as to cause nuisance or adversely affect the water for beneficial uses.
- 14. <u>Settleable Materials</u> Waters must not contain substances in concentrations that result in deposition of material that causes nuisance or that adversely affects the water for beneficial uses. For natural high-quality waters, the concentration of settleable materials must not be raised by more than 0.1 milliliter per liter.
- 15. <u>Suspended Materials</u> Waters must not contain suspended materials in concentrations that cause nuisance or that adversely affect the water for beneficial uses. For natural high-quality waters, the concentration of total suspended materials must not be altered to the extent that such alterations are discernible at the 10 percent significance level.
- 16. <u>Taste and Odor</u> Waters must not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish or other edible products of aquatic origin, that cause nuisance, or that adversely affect the water for beneficial uses. For naturally high-quality waters, the taste and odor must not be altered.
- 17. <u>Temperature</u> The natural receiving water temperature of all waters must not be altered unless it can be demonstrated to the satisfaction of the Lahontan Water Board that such an alteration in temperature does not adversely affect the water for beneficial uses. For waters designated WARM, water temperature must not be altered by more than five degrees Fahrenheit (5°F) above or below the natural temperature. For waters designated COLD, the temperature must not be altered.
- 18. Toxicity All waters must be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration and/or other appropriate methods as specified by the Lahontan Water Board (or the Executive Officer or his/her designee).

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- 19. <u>Turbidity</u> Waters must be free of changes in turbidity that cause nuisance or adversely affect the water for beneficial uses. Increases in turbidity must not exceed natural levels by more than 10 percent.

# II. REQUIREMENTS AND PROHIBITIONS

# A. General

- 1. The discharge must not cause or threaten to cause a condition of pollution or nuisance as defined in CWC, section 13050.
- 2. The discharge of waste, as defined in CWC, section 13050, subdivision (d), must not cause an exceedance of any applicable Water Quality Objective (WQO) contained in the Basin Plan or a State Plan or Policy.
- 3. Where any numeric or narrative WQO contained in the Basin Plan is already being exceeded, any discharge which causes further degradation or pollution is prohibited.
- 4. The discharge of pesticides to surface waters or groundwater is prohibited.
- 5. The discharge of waste, except to the authorized disposal sites, is prohibited.
- 6. Water used for dust control must be limited to a minimal amount. A "minimal amount" is defined as that amount which will not result in run-off.
- All purge water discharged to the ground at the Facility and water used for dust control must not contain concentrations of VOCs in excess of the WQPS.
- 8. The discharge of solid or liquid waste, leachate, or any other deleterious material to surface waters or groundwater is prohibited.
- 9. The discharge of waste that contains liquid in excess of the moisture-holding capacity of the Landfill, or which contains liquid in excess of the moisture-holding capacity as a result of waste management operations, compaction, or settlement, is prohibited.
- 10. Surface drainage from offsite areas and internal site drainage from surface or subsurface sources, must not contact or percolate through solid wastes discharged at the Landfill.

- 11. The Landfill must be closed in accordance with the FCPCMP accepted by the Lahontan Water Board and must be maintained in a closed condition per the FCPCMP and these WDRs.
- 12. The Discharger must remove and relocate any waste, which is or has been discharged at the WMU in violation of these requirements. The waste must be relocated to a site which is permitted to receive such wastes. All removal and relocation projects must be coordinated with regulatory agencies, including but not limited to the Mono County Environmental Health Services.
- 13. The Discharger must maintain in good working order any control system or monitoring device installed to achieve compliance with these WDRs.
- 14. The WMU must be protected from inundation, washout, or erosion of wastes and erosion of covering materials resulting from a 24-hour, 100-year storm or a flood having a 100-year return period.
- 15. The exterior surfaces of the WMU must be graded to promote lateral run-off of precipitation and to prevent ponding. Ponding of any liquid on the WMU is prohibited.
- 16. The Discharger must notify the Lahontan Water Board within one business day of any flooding, slope failure or other change in site conditions that could impair the integrity of the WMU or of precipitation and drainage control structures. The Discharger must correct any failure that threatens the integrity of the WMU, after approval of the method, in accordance with a schedule established by the Lahontan Water Board as specified in CCR, title 27, section 21710, subdivision (c)(2).
- 17. Pursuant to CCR, title 27, section 21090, subdivision (a)(4)(C), the Discharger must repair, in a timely manner, any breach or other cover problem discovered during the periodic inspection of the WMU cover. Repairs to the soil cover material must follow a Construction Quality Assurance (CQA) plan, as required in CCR, title 27, sections 20323 and 20324, and the FCPCMP.

### B. Landfill Cover Construction Requirements

 The Discharger proposes to construct an engineered alternative final cover over the Landfill, as described in Finding 15. The Discharger must construct the final cover system for the Landfill as described in Finding 15 and in accordance with the construction details contained in the Design Plan and engineered drawings submitted to and accepted by the Lahontan Water Board.

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- 2. The Design Plan must contain a Construction Quality Assurance (CQA) Plan, as well as detailed engineered drawings and specifications for each major design element, including, at a minimum, the accepted elements of the cover system as described in the JTD/ROWD dated August 2022. Any proposed revisions to the accepted design or monitoring programs, including plans and specifications for the installation of additional groundwater point of compliance and/or unsaturated zone monitoring points, and updated WQPS must be submitted a minimum of 120 days prior to the construction and must be prepared, signed, and sealed by a California-registered Civil Engineer or Certified Engineering Geologist. CQA Plans must conform to all of the requirements specified in CCR, title 27, section 20324.
- 3. The Discharger must adhere to the accepted engineering Design Plan prepared pursuant to CCR, title 27, section 21760, including specifications, and technical reports submitted and the JTD/ROWD and all requirements contained within this Order.

# C. <u>Landfarm Clean Closure Requirements</u>

The Discharger has completed clean closure actions for the Landfarm as described in the work plan contained in the FCPCMP submitted to the Lahontan Water Board and in Finding 15.b. To verify clean closure, verification soil sampling must be conducted, and a confirmation sampling and analyses report must be submitted to the Lahontan Water Board for review and acceptance.

#### D. Storm Water Discharges

The Discharger must implement the site-specific Stormwater Pollution Prevention Plan (SWPPP) prepared for the site throughout the post-closure maintenance period for the Facility. The Discharger must update the SWPPP, as conditions warrant, and submit the updated plan to the Lahontan Water Board within 30 days of plan update. The SWPPP must be implemented such that waste in discharges of storm water are reduced or prevented to achieve the best practicable treatment level using controls, structures, and management practices.

# E. <u>Electronic Submittal of Information</u>

Pursuant to CCR, title 23, section 3890, the Discharger must submit all reports, including soil, soil vapor, and water data, prepared for the purpose of subsurface investigation or remediation of a discharge of waste to land subject to CCR, title 27, Division 2, electronically over the internet to the State Water Board's GeoTracker system. This requirement is in addition to, and not superseded by, any other applicable reporting requirement.

#### III. WATER QUALITY MONITORING AND RESPONSE PROGRAMS

# A. <u>Detection Monitoring Program</u>

The Discharger must maintain a DMP as required in CCR, title 27, section 20420.

# B. <u>Evaluation Monitoring Program</u>

The Discharger must establish an EMP whenever there is measurably significant evidence or significant physical evidence of a release from a WMU pursuant to CCR, title 27, section 20425. Within 90 days of initiating an EMP, the Discharger must delineate the nature and extent of the release, as well as develop, propose, and support corrective action measures to be implemented in a corrective action program.

# C. Corrective Action Program

The Discharger must implement a corrective action program as specified in CCR, title 27, section 20385(a)(4) and 20430(c), following completion of an EMP.

# D. <u>Water Quality Protection Standard</u>

- 1. The WQPS consists of COCs, concentration limits, monitoring points, and the point of compliance. The COCs, concentration limits, monitoring points, and point of compliance for groundwater and unsaturated zone monitoring are described in MRP No. R6-2025-TENTATIVE.
- 2. The Discharger must propose to the Lahontan Water Board any new constituents of concern proposed for discharge to the Facility at least 180 days before discharge. Before a new discharge commences, the Discharger must estimate the concentrations for such constituents within the waste stream and submit written statistical method(s) in order to detect a release of such constituents
- 3. At any given time, the concentration limit for each COC must be equal to the background data set of that constituent unless a concentration limit greater than background has been established. The background data set for each monitoring point/constituent pair should be comprised of at least eight data points, collected quarterly.
- 4. If the Discharger or Lahontan Water Board determines that concentration limits were or are exceeded, the Discharger must immediately institute verification procedures upon such determination as specified in Section III. F of this Order or, within 90 days of such determination, submit a technical report pursuant CWC,

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section 13267, subdivision (b), proposing an EMP meeting the provisions of CCR, title 27. Within 90 days of the Lahontan Water Board authorizing the EMP, the Discharger must complete the delineation, develop a suite of proposed corrective action measures, and submit a revised ROWD with a proposed corrective action program for adoption by the Lahontan Water Board.

5. Monitoring of the groundwater and unsaturated zone must be conducted to obtain background data and to provide the best assurance of the early detection of any new releases from the WMUs.

# E. <u>Data Analysis</u>

Within 45 days after completion of sampling, the Discharger must determine at each Monitoring Point whether there is measurably significant evidence and/or significant physical evidence of a release from the Facility. The analysis must consider all monitoring parameters and COCs. The Executive Officer may also make an independent finding that there is measurably significant evidence and/or significant physical evidence of a release.

- 1. To determine whether there is "measurably significant" (as defined in CCR, title 27, section 20164) evidence of a release from the Facility, the Discharger must use approved statistical data analysis methods to evaluate point of compliance groundwater data, as required by CCR, title 27, section 20415, subdivision (e).
- 2. To determine whether there is significant physical evidence of a release from the Facility, the Discharger must also use non-statistical methods. Significant physical evidence may include, but is not limited to, unexplained volumetric changes in the WMUs, unexplained stress in biological communities, unexplained changes in soil characteristics, visible signs of leachate migration, unexplained water table mounding beneath or adjacent to the WMUs, and/or any other change in the environment that could be reasonably be expected to be the result of a new release from the WMUs. Other non-statistical evidence of a release may include trends of increasing concentrations of one or more constituents over time.
- 3. If there is measurably significant evidence and/or significant physical evidence of a release, the Discharger must immediately notify the Lahontan Water Board by telephone as to the monitoring points and constituent(s) or parameters involved followed by written notification sent certified mail within seven days or electronic mail (see "Unscheduled Reports to be Filed With the Lahontan Water Board," MRP No. R6-2025-TENTATIVE). The Discharger must initiate the verification procedures, as specified in this Order, Section III.F.

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# F. Verification Procedures

Whenever there is a determination by the Discharger or Executive Officer that there is measurably significant evidence or significant physical evidence of a release, the Discharger must initiate verification procedures as specified below.

- 1. The Discharger must either conduct a composite retest using data from the initial sampling event with all data obtained from the resampling event or must conduct a discrete retest in which only data obtained from the resampling event must be analyzed to verify evidence of a release. Alternatively, the Discharger may perform a pass 1-of-3 retesting approach using quarterly samples, as an engineered alternative.
- 2. The verification procedure need only be performed for the constituent(s) that has shown a measurably significant evidence of a release and must be performed for those monitoring points at which a release is indicated.
- 3. Within seven days of receiving the results of the last laboratory analyses for the retest, the Discharger must report to the Lahontan Water Board by certified mail, the results of the verification procedure, as well as all data collected for use in the retest.
- 4. If the Discharger or Executive Officer verifies that there is or was evidence of a release, the Discharger is required to submit a technical report to the Lahontan Water Board within 90 days of such a determination, pursuant to CWC, section 13267, subdivision (b). The report must propose an EMP (see Section III.B above) or make a demonstration to the Lahontan Water Board that there is a source other than the Facility that caused evidence of a release (see "Unscheduled Reports to be Filed With the Lahontan Water Board," MRP No. R6-2025-TENTATIVE).
- 5. If the Discharger declines to conduct verification procedures, the Discharger must submit a technical report, as specified in this Order, Section III.G.

### G. Technical Report Without Verification Procedures

If the Discharger chooses not to initiate verification procedures after there has been a determination made for evidence of a release, a technical report must be submitted pursuant to CWC, section 13267(b). The report must propose an EMP or attempt to demonstrate that the release did not originate from the Facility.

#### H. Monitoring and Reporting

- 1. Pursuant to CWC, section 13267, subdivision (b), the Discharger must comply with the monitoring and reporting requirements as established in the attached MRP No. R6-2025-TENTATIVE and as specified by the Executive Officer. The MRP may be modified by the Lahontan Water Board Executive Officer.
- The Discharger must comply with the "General Provisions for Monitoring and Reporting," dated September 1, 1994, which is attached to and made part of MRP No. R6-2025-TENTATIVE.

# IV. PROVISIONS

# A. Rescission of Waste Discharge Requirements

Board Order No. 6-96-156 and MRP No. 6-96-156 are hereby rescinded.

#### B. <u>Standard Provisions</u>

The Discharger must comply with the "Standard Provisions for Waste Discharge Requirements" which is attached to and made part of this Order.

# C. Final Closure and Post-Closure Maintenance Plan

The final closure and post-closure maintenance plan, August 2021, describes the manner of closure and the proposed post-closure maintenance of the Facility during the post-closure period, and was accepted by the Lahontan Water Board in a letter dated October 8, 2021, under Board Order 6-96-156. The Discharger must submit a report to the Lahontan Water Board on or before <a href="March 30">March 30</a>, and by <a href="March 30">March 30</a> every year thereafter, indicating that the FCPCMP is in conformance with existing Facility maintenance and operations. The FCPCMP and cost estimates for post-closure maintenance and corrective action of all reasonably known or foreseeable releases must be updated if there is a significant change in the activities or costs for maintenance and/or monitoring of the Facility, and reflect changes in inflation rates (see IV.D below). This report may be included in the annual monitoring report as required in MRP No. R6-2025-TENTATIVE.

#### D. <u>Financial Assurance</u>

The Discharger must at all times maintain adequate and viable financial assurances acceptable to the Lahontan Water Board Executive Officer for costs associated with post-closure, maintenance and monitoring, and for corrective action for all known or reasonably foreseeable releases for the WMU. The Discharger must submit to the Lahontan Water Board a financial

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assurance report on or before March 30, 2027, and by March 30 every year thereafter, providing evidence that adequate financial assurances has been provided for closure, post-closure maintenance, and for corrective action of all known and reasonably foreseeable releases. Evidence must include the total amount of money available in the fund developed by the Discharger. In addition, the Discharger must either provide evidence that the amount of financial assurance is still adequate or increase the amount of financial assurance by an appropriate amount. An increase may be necessary due to inflation, change(s) in regulatory requirements, change(s) in the approved closure plan, or other unforeseen events.

# V. <u>ADDITIONAL REPORTING</u>

#### A. Final Construction Quality Assurance Report

**No later than 180 days** following the construction completion of the final cover and closure activities, including clean closure of the Landfarm, a Final CQA Report, required by CCR, title 27, section 20324, subdivision (d)(1)(C), must be submitted to the Lahontan Water Board for review and acceptance. The report must be certified by a California professional civil engineer or a California professional engineering geologist. It must contain sufficient information and test results to verify specifications and with the accepted engineered alternative to the prescriptive standards and performance goals of CCR, title 27.

#### B. Sludge Landfarm Confirmation Sampling and Reporting

No later than 180 days following the construction completion of the final cover and closure activities, specifically clean closure of the Landfarm, a confirmation sampling and analyses report must be submitted to the Lahontan Water Board for review and acceptance. The confirmation samples must be analyzed at a California Environmental Laboratory Accreditation Program (ELAP) certified laboratory; the report must be signed by either a California professional civil engineer or a California professional engineering geologist. Confirmation sampling and analyses are necessary to verify clean closure and must be collected and analyzed individually for (verification COCs). The sludge landfarm will be considered clean closed if the concentrations reported for each individual sample are consistent with the concentrations of constituents in the background soil.

#### C. Monitoring Systems Installation Work Plan

**No later than 60 days** prior to the construction of a monitoring system or monitoring system component, the Discharger must submit for Lahontan Water Board review and acceptance a work plan for the installation of monitoring system or monitoring component (e.g., monitoring wells). The

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work plan must be certified by a California professional civil engineer or a California professional geologist.

# D. <u>Monitoring Systems Installation Report</u>

No later than 90 days following the construction completion of a monitoring system or monitoring system component, the Discharger must submit a technical report discussing the installation of the monitoring systems or monitoring system component for the WMU. The report must summarize all work activities associated with the installation of the monitoring system and/or monitoring component. The report must be certified by a California professional civil engineer or a California professional geologist. It must contain sufficient information to verity that the construction was in accordance with State and/or County standards.

# E. PFAS Investigation

By February 1, 2026, the Discharger must submit for Lahontan Water Board review and acceptance a work plan for an initial sampling and analysis of PFAS in soil directly below the (former) landfarm and groundwater from beneath the Facility. The work plan must include a sampling and analysis plan specific to PFAS sampling. At a minimum, the work plan must provide the following:

#### PFAS Work Plan

- A map identifying the monitoring locations for collection of samples for PFAS analysis. Sampling locations must appropriately represent all conditions at your facility and must
  - include soil at the (former) landfarm and groundwater from beneath the Facility.
- b. A Sampling and Analysis Plan that includes quality assurances and quality control procedures necessary to ensure valid and representative data is obtained and reported. Specify the appropriate sampling procedures, including sampling equipment, sampling containers, the quality of water used for blank preparation and equipment decontamination, sample hold times, and quantities for sampling PFAS compounds. To minimize cross-contamination, all sampling materials, equipment, blanks, containers, and equipment decontamination reagents must be PFAS-free, to the maximum extent practicable. Additional guidance for preventing sample contamination can be found at: https://www.waterboards.ca.gov/pfas/docs/sept\_2020\_pfas\_sampling\_quidelines.pdf.

- c. PFAS analytes and their respective reporting limits (MRP, Attachment D).
- d. The name of the selected laboratory for PFAS analysis in compliance with and capable of achieving the quality control/quality assurance requirements specified in Table B-15 of the Department of Defense (DoD) Quality Systems Manual (QSM), dated 2017, version 5.1 or newer.
- e. If the sampling locations are known to have or suspected to be constructed with materials containing PFAS compounds, include descriptions of the materials.
- f. Signature, stamp, and contact information for the Californialicensed Professional Geologist or Professional Engineer acting in responsible charge for the content of the work plan.

# 2. PFAS Investigation Report

- a. Analytical results from the sampling event must be uploaded to the State Water Board's GeoTracker system within 30 days of receiving the laboratory analytical report. The analytical results must be submitted in the Laboratory Electronic Deliverable Format™ (LAB EDF) electronic data deliverable (EDD).
- b. A final sampling and analysis report must be submitted and, at minimum, must include the following information:
  - Description of the sampling activities and lab analytical method used, and any variation in sampling and analysis from what was provided in the accepted work plan;
  - ii. Written summary of the analytical results;
  - iii. Summary table of analytical results;
  - iv. Copies of Chains of Custody;
  - v. Copies of field sampling logs;
  - vi. Copy of the site map showing the sampling locations; and
  - vii. Copy of laboratory analytical results.
- c. The final sampling and analysis report must be submitted <u>no</u>
  later than 90 days following Lahontan Water Board

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acceptance of the work plan. However, if the existing MRP sampling schedule permits, sampling may be conducted concurrently with the next scheduled monitoring and sampling event and the final sampling and analysis report is due 90 days following the monitoring and sampling event.

I, Ben Letton, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by California Regional Water Quality Control Board, Lahontan Region, on November 5, 2025.

BEN I ETTON

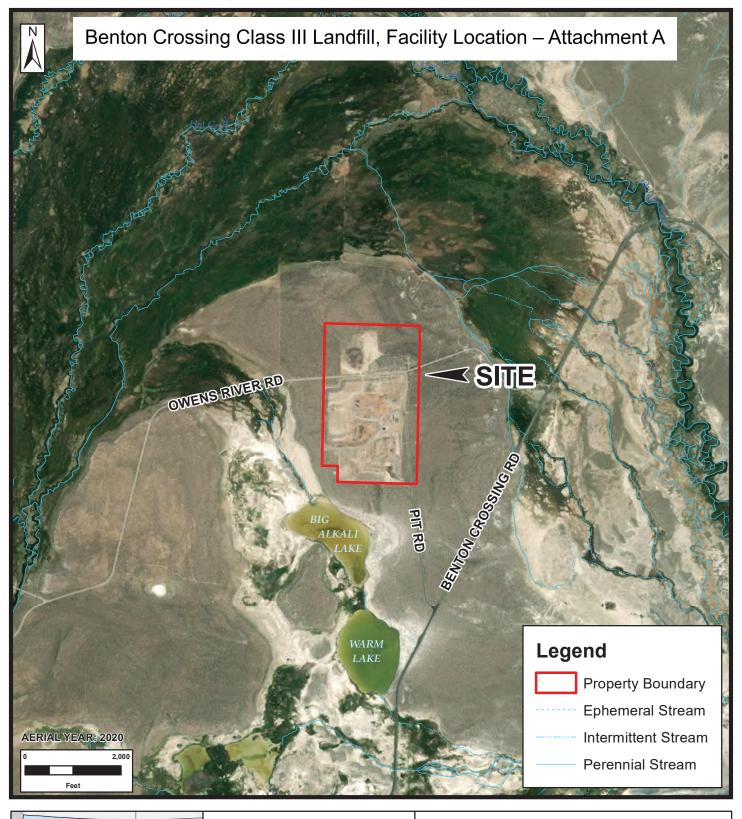
# BEN LETTON EXECUTIVE OFFICER

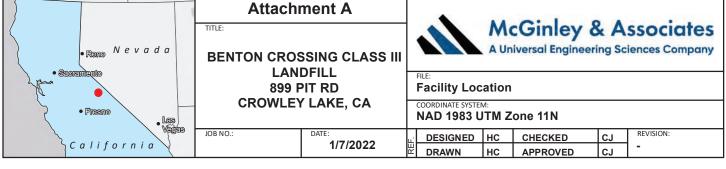
Attachments: A. Facility Location, Benton Crossing Class III Landfill

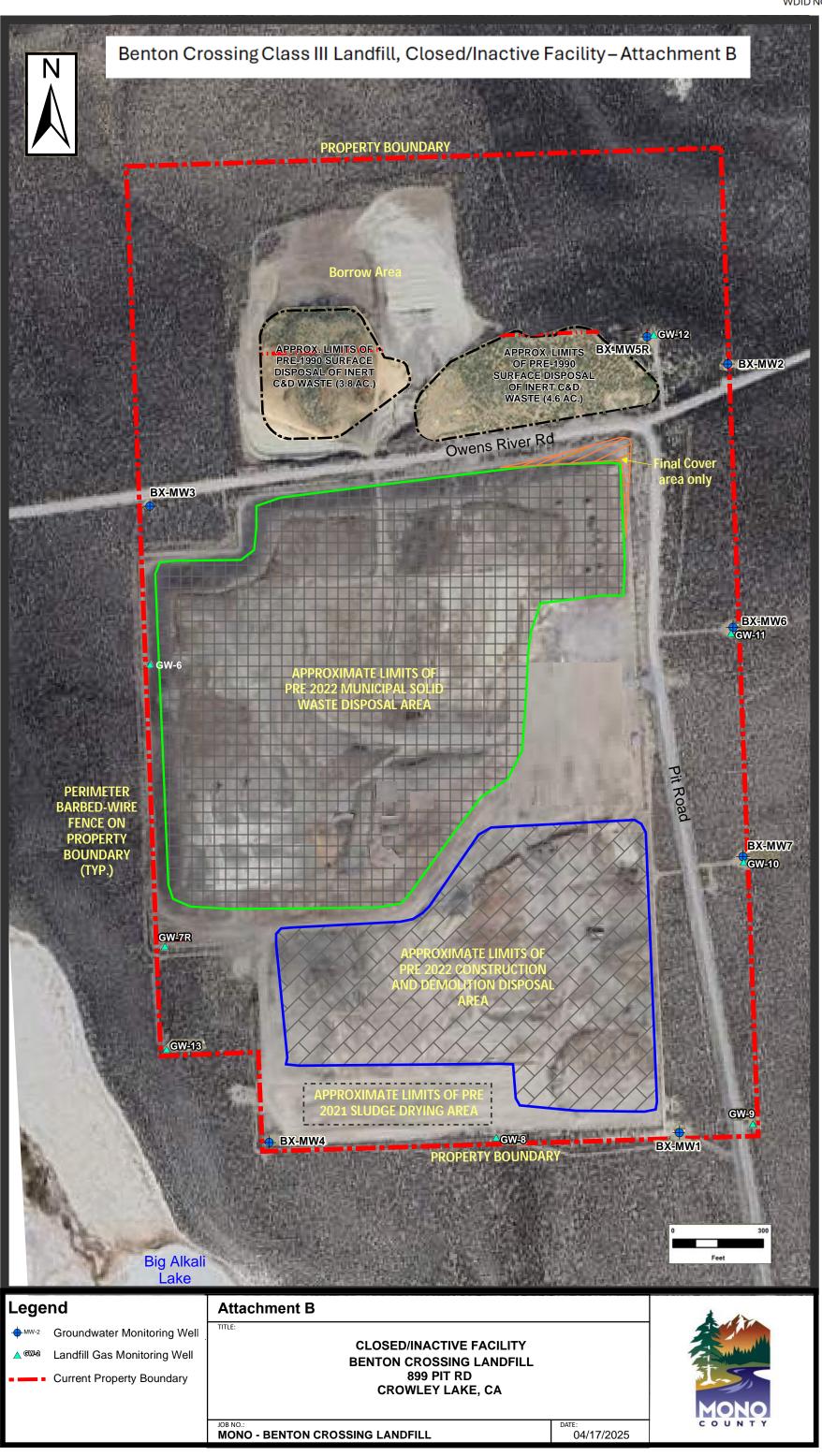
B. Existing Facility, Benton Crossing Class III Landfill

C. Proposed Closure Cover, Benton Crossing Class III Landfill

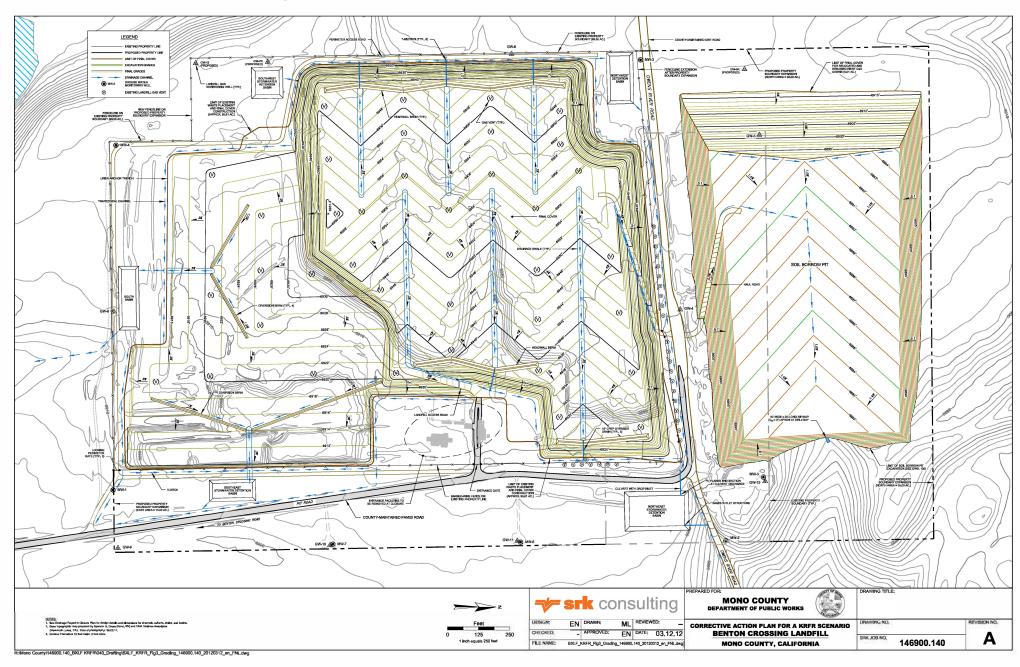
D. Standard Provisions for Waste Discharge Requirements







# Benton Crossing Class III Landfill, Proposed Closure Cover – Attachment C



#### ATTACHMENT D

# STANDARD PROVISIONS FOR WASTE DISCHARGE REQUIREMENTS

### 1. <u>Inspection and Entry</u>

The Discharger must allow Lahontan Water Board staff, upon presentation of credentials, to:

- a. Enter upon premises in which a waste management unit (WMU) or former WMU is located or in which any required records are kept;
- b. Copy any records relating to the discharge or relating to compliance with the waste discharge requirements;
- c. Inspect monitoring and control equipment, practices, or operations regulated or required under this Order; and
- d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Order or as otherwise authorized by the Water Code, any substances or parameters at this location.

# 2. Reporting Requirements

- a. Pursuant to California Water Code 13267(b), the Discharger must report any noncompliance that may endanger human health or the environment. The Discharger must immediately notify the Lahontan Water Board after becoming aware of when an adverse condition occurred as a result of this discharge; a written report shall be provided within ten days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. A final certified report must be submitted through the online GeoTracker system. An adverse condition includes, but is not limited to, spills of petroleum products or toxic chemicals, sanitary sewer overflows, damage to liners, damage to the final cover, nuisance erosion or damage to control facilities that could affect compliance.
- b. Pursuant to California Water Code Section 13260 (c), any proposed material changes in the character of the waste, manner or method of treatment or disposal, increase of discharge, or location of discharge, shall be reported to the Lahontan Water Board at least 120 days in advance of implementation of any such proposal. This shall include, but not be limited to, all significant soil disturbances.

- c. The owner(s) of, and Discharger upon, property subject to waste discharge requirements shall be considered to have a continuing responsibility for ensuring compliance with applicable waste discharge requirements in the operations or use of the owned property. Pursuant to California Water Code Section 13260(c), any change in the ownership and/or operation of property subject to the waste discharge requirements shall be reported to the Lahontan Water Board. Notification of applicable waste discharge requirements shall be furnished in writing to the new owners and/or operators and a copy of such notification shall be sent to the Lahontan Water Board.
- d. If a Discharger becomes aware that any information submitted to the Lahontan Water Board is incorrect, the Discharger shall immediately notify the Lahontan Water Board, in writing, and correct that information.
- e. Reports required by the waste discharge requirements, and other information requested by the Lahontan Water Board, must be signed by a duly authorized representative of the Discharger. Under Section 13268 of the California Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1000) for each day of violation.
- f. If the Discharger becomes aware that their waste discharge requirements are no longer needed (because the project will not be built or the discharge will cease) the Discharger shall notify the Lahontan Water Board in writing and request that their waste discharge requirements be rescinded.

#### 3. Right to Revise Waste Discharge Requirements

The Lahontan Water Board reserves the privilege of changing all or any portion of the waste discharge requirements upon legal notice to and after opportunity to be heard is given to all concerned parties.

#### 4. Duty to Comply

Failure to comply with the waste discharge requirements may constitute a violation of the California Water Code and is grounds for enforcement action or for permit termination, revocation and reissuance, or modification.

# 5. <u>Duty to Mitigate</u>

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of the waste discharge requirements which has a reasonable likelihood of adversely affecting human health or the environment.

#### 6. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of waste isolation and control (and related appurtenances) that are

installed or used by the Discharger to achieve compliance with the waste discharge requirements. Proper operation and maintenance includes adequate laboratory control, where appropriate, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the Discharger, when necessary to achieve compliance with the conditions of the waste discharge requirements.

# 7. <u>Waste Discharge Requirement Actions</u>

The waste discharge requirements may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for waste discharge requirement modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any of the waste discharge requirements conditions.

#### 8. <u>Property Rights</u>

The waste discharge requirements do not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

### 9. Enforcement

The California Water Code provides for civil liability and criminal penalties for violations or threatened violations of the waste discharge requirements including imposition of civil liability or referral to the Attorney General.

# 10. Availability

A copy of the waste discharge requirements, monitoring and reporting requirements, and sampling and analysis plan shall be kept and maintained by the Discharger and always be available to operating personnel.

# 11. Severability

Provisions of the waste discharge requirements are severable. If any provision of the requirements is found invalid, the remainder of the requirements shall not be affected.

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

# MONITORING AND REPORTING PROGRAM NO. R6-2025-TENTATIVE WDID NO. 6B260300002

#### **FOR**

# BENTON CROSSING CLASS III LANDFILL AND SLUDGE LANDFARM

Mono County

This Monitoring and Reporting Program (MRP) No. R6-2025-TENTATIVE is issued to the Mono County Public Works Department, Solid Waste Management Division (Discharger) for the Benton Crossing Class III Landfill and Sludge Landfarm pursuant to California Water Code (CWC), section 13267 and incorporates requirements for groundwater and unsaturated zone monitoring and reporting; facility monitoring, maintenance, and reporting; and financial assurances reporting contained in California Code of Regulations (CCR), title 27, section 20005, et seq. The technical reports required by Board Order No. R6-2025-TENTATIVE and MRP No. R6-2025-TENTATIVE are necessary to ensure compliance with the Waste Discharge Requirements. Therefore, the burden, including costs of these reports, bears a reasonable relationship to the need for the report and the benefits to be obtained from the reports.

# I. WATER QUALITY PROTECTION STANDARD

A Water Quality Protection Standard (WQPS) is required by CCR, title 27, sections 20390 through 20410, to provide the earliest possible detection of a release from a waste management unit (WMU) to the underlying soil and/or groundwater. The WQPS consists of all constituents of concern (COCs), the concentration limits for each COC, the point of compliance, and all water quality monitoring points. The Lahontan Water Board must review and approve the WQPS, or any modification thereto, for each monitored medium.

The Discharger is currently implementing a detection monitoring program (DMP) to monitor groundwater and the unsaturated zone at the Landfill. A WQPS is necessary to provide the earliest detection of any releases from the Landfill.

#### A. Constituents of Concern

The COCs include all the waste constituents, their reaction products, and hazardous constituents that are reasonably expected to be in or derived from waste contained in a waste management unit. The COCs for each monitored medium are listed in Attachment A, which is made part of this MRP. The Discharger must monitor all COCs at the sampling frequency and reporting frequency listed in Attachment A.

#### B. Monitoring Parameters

Monitoring parameters are those COCs that provide a reliable indication of a release from the Landfill. The monitoring parameters for each monitored medium are listed in this MRP, Attachment A. The Discharger must monitor all monitoring parameters at the sampling frequency and reporting frequency listed in Attachment A.

#### C. Concentration Limits

Concentration limits are established for each COC and are intended to reflect background ambient conditions of surface and subsurface media that are unaffected by a release from the waste management units. At any given time, the concentration limit for each COC must be equal to the background data set of that constituent unless a concentration limit greater than background (CLGB) has been established. CCR, title 27, section 20415 allows for various options to determine concentration limits including statistical interwell and intrawell methods and non-statistical methods.

- 1. The Discharger is using the following methodologies to determine concentration limits for the groundwater monitoring program.
  - a. <u>Intrawell Comparisons</u> The Discharger is using historical water quality data from individual groundwater monitoring wells to develop well-specific concentration limits for inorganic constituents. Intrawell comparisons for these COCs are appropriate because these COCs show spatial variation in water quality across the site and a release has already been detected in groundwater.
  - b. Non-Statistical Comparisons For inorganic COCs either not detected in the background well or only detected at trace concentrations and for man-made organic COCs, the concentration limit is set at either the respective practical quantitation limit (PQL) or the method detection limit (MDL) for the analytical method used.
- 2. The Discharger is not required to have concentration limits for soil-pore gas methane, carbon dioxide, nitrogen, and oxygen. These gases exist naturally in soil with a high degree of variability such that development of background concentrations would be technically infeasible. While volatile organic compounds (VOCs) are not naturally occurring in the soil, establishing concentration limits for VOCs in the unsaturated zone is technically infeasible at this time because few studies have evaluated the relationship between soil-pore gas VOC concentrations and the potential threat to water quality. The Discharger will collect soil-pore gas data in the unsaturated zone and use those data to characterize the relationship, if any, between landfill gas migration, soil-pore gas VOC concentrations, and the potential threat to water quality at the soil-groundwater interface.

If subsequent sampling of the background monitoring point(s) indicates significant water quality changes due to either seasonal fluctuations or other reasons unrelated to waste management activities at the Landfill, the Discharger may request modification of the WQPS concentration limits to provide season-specific concentration limits (background data sets) for each COC at each monitoring point.

#### D. Point of Compliance and Monitoring Points

The point of compliance and monitoring points for the groundwater and unsaturated zone are shown in Attachment B of this MRP. The Discharger may add monitoring points, as needed, to comply with the DMP, evaluation monitoring program (EMP), and corrective action program requirements contained in Board Order No. R6-2025-TENTATIVE and this MRP, and as approved by the Lahontan Water Board.

The point of compliance is a vertical surface located at the hydraulically downgradient limit of the Landfill that extends through the uppermost aquifer underlying the Landfill.

#### E. Compliance Period

The compliance period for municipal solid waste landfills is the number of years equal to the active life of the Landfill plus a minimum of 30 years during the postclosure period in accordance with Code of Federal Regulations (CFR), title 40. Part 258.61. The compliance period is the minimum period during which the Discharger must conduct a water quality monitoring program subsequent to a release from the Landfill. The compliance period must begin anew each time the Discharger initiates an EMP. The compliance period must extend as long as waste poses a threat to water quality pursuant to CCR, title 27, section 20950(a)(1), and CFR, title 40, Part 258.61(b)(2). The Landfill closed in December 2022; therefore, the compliance period is expected to end in 2053, but may be extended if the Facility is not in compliance with the WQPS. If the Discharger is engaged in a corrective action plan at the scheduled end of the compliance period, the compliance period shall be extended until the Discharger can demonstrate that the Landfill has been in continuous compliance with its WQPS for a period of three consecutive years as specified in CCR, title 27, section 20410(c).

#### II. MONITORING

The Discharger must comply with the monitoring requirements outlined below. All monitoring and inspection activities must be documented, and all sampling must be conducted in accordance with an accepted Sampling and Analysis Plan (SAP) that includes quality assurance and quality control standards and procedures, as described in the General Provisions for Monitoring and Reporting (Attachment C of this MRP).

# A. <u>Detection Monitoring Program</u>

The Discharger must operate and maintain a detection monitoring system that complies with the DMP monitoring provisions contained in CCR, title 27, sections 20380 through 20435. Monitoring of the groundwater and unsaturated zone must be conducted to provide the best assurance of the earliest detection of any new releases from the Landfill. Changes to the existing monitoring system must be designed and certified by a California-licensed professional geologist or professional civil engineer as meeting the requirements of CCR, title 27, section 20415(e)(1). The Discharger must collect, preserve, and transport samples in accordance with the SAP.

All samples collected in accordance with this MRP, except for field parameters, are to be analyzed by a California state-certified laboratory using United States Environmental Protection Agency (USEPA) analytical methods or the most recently approved SW-846 USEPA method or other equivalent USEPA method. An alternate method may be used if acceptable to the Executive Officer.

#### 1. Unsaturated Zone Monitoring

The unsaturated (vadose) zone monitoring program monitors the composition of soil-pore gas beneath and adjacent to the Landfill through the collection of gas samples for laboratory analyses and field measurements.

#### a. Monitoring Points

The unsaturated zone for the Landfill is monitored for soil-pore gas using gas probes located around the perimeter of the unlined Landfill. All unsaturated zone monitoring point locations are shown on MRP, Attachment C.

# b. <u>Monitoring Parameters and Constituents of Concern</u>

The Discharger must monitor soil-pore gas for all COCs and monitoring parameters in accordance with the frequencies listed in Attachment A.

#### c. Soil-Pore Gas

Prior to beginning gas collection at the Landfill, the instrument(s) must be calibrated using laboratory-grade calibration gases and procedures according to manufacturer recommendations and the accepted SAP. This must be done each day the instrument is used and whenever an instrument has been transported from one facility to another to ensure that the field calibration is performed at the same atmospheric pressure at which the soil-gas samples are collected.

Prior to sampling, each gas probe must be purged of the gas that has been standing inside the casing until methane, oxygen, and carbon dioxide concentrations have stabilized. These parameters will be considered stable when continuous readings have stopped fluctuating. Atmospheric pressure will also be recorded during the purging process.

#### d. <u>Field Parameters</u>

The Discharger must monitor soil-pore gas for all field parameters in accordance with the frequencies listed in Attachment A.

#### e. Soil-Pore Gas

If methane gas is detected during field monitoring at or above a threshold concentration of 5 percent of methane gas volume in air, then soil-pore gas samples must be taken from that gas monitoring probe (during that monitoring event) and analyzed for the soil-pore gas monitoring parameters listed in Attachment A.

## f. <u>Calibration Documentation</u>

Annually, the Discharger must submit documentation of instrument calibration and performance checks to verify proper operation of all field monitoring equipment.

#### 2. Groundwater

The groundwater monitoring program monitors the quality of groundwater that passes through the point of compliance as well as monitors the quality of groundwater upgradient, cross-gradient, and downgradient of the Landfill through the collection of groundwater samples for laboratory analysis and field measurement of water quality parameters.

#### a. Monitoring Points

Groundwater monitoring points are shown on MRP, Attachment B.

#### b. Depth to Groundwater

Prior to purging and sampling, the Discharger must measure and record the depth below the ground surface of the static groundwater elevation (feet below ground surface [bgs]) in all groundwater monitoring wells. The measurements must be accurate to the nearest 0.01 foot.

#### c. Groundwater Purging and Sampling

Prior to sampling, all groundwater monitoring wells must be purged using either standard or low-flow techniques until dissolved oxygen (DO), electrical conductivity, pH, temperature, and turbidity of extracted well water have stabilized. These parameters will be considered stable in accordance with procedures specified in the accepted SAP.

#### d. Monitoring Parameters and Constituents of Concern

The Discharger must monitor, at each groundwater monitoring well, all COCs and monitoring parameters in accordance with the frequencies listed in Attachment A. Should any non-monitoring parameter COC exceed their respective concentration limit by a measurably significant amount at any given monitoring point, that non-monitoring parameter COC must become a monitoring parameter at that monitoring point.

#### e. Field Parameters and Supplemental Parameters

The Discharger must monitor the groundwater for all field parameters and supplemental parameters in accordance with the frequencies listed in Attachment A.

#### f. Aquifer Characteristics

The Discharger must calculate, and illustrate on a site plan and/or aerial photograph, the following aquifer characteristics: the depth to groundwater (feet bgs) in each groundwater monitoring well; the static water level (feet above mean sea level) in each groundwater monitoring well; the slope of the groundwater gradient (feet/feet); the direction of the groundwater gradient beneath and around the Landfill; the velocity of groundwater flow (feet/year); and the current groundwater isocontours for that monitoring period.

#### g. Calibration Documentation

Annually, the Discharger must submit documentation of instrument calibration and performance checks to verify proper operation of the field monitoring equipment.

#### B. Facility Monitoring

The following elements must be monitored and reported to the Lahontan Water Board in accordance with the schedule specified in this MRP, Section IV.B. Maintenance and repairs must be performed in a timely manner following discovery of the problem in accordance with the procedures outlined in the

accepted FCPCMP.

# 1. <u>Annual Inspection</u>

Annually, prior to the anticipated rainy season, but no later than <a href="September 30">September 30</a>, the Discharger must conduct an inspection of the Landfill. The inspection must assess damage to the intermediate cover, drainage control system, groundwater monitoring equipment (including wells, etc.), and must include adequate observations to assess the Landfill condition. Any necessary construction, maintenance, or repairs must be completed within 30 days of the inspection. The Discharger must document the inspection, and the repair measures implemented, including photographs of the problem and of the repairs.

# C. <u>Final Cover Integrity Monitoring and Maintenance Program</u>

The Discharger proposes to construct an engineered alternative final cover over the Landfill. The proposed alternative final cover will consist, from top to bottom, of a 24-inch thick vegetative/protective cover layer including 3-inches of wood chips (erosion resistant); a 60-mil linear low-density polyethylene (LLDPE) Super Grip Net geomembrane with a 12-ounce (oz.) geotextile layer on top or a 60-mil double-sided textured LLDPE on top of 220 drainage geocomposite net with a 6-oz. geotextile on both sides; and a 24-inch thick foundation layer (1-foot placed as interim cover). The cover will be graded to prevent leachate formation due to storm water infiltration, to promote lateral runoff, and to prevent ponding. Pursuant to CCR, title 27, section 21090, the Discharger must monitor the condition of the cover system as outlined in the Final Closure and Post-Closure Maintenance Plan (FCPCMP). The purpose of this monitoring is to ensure the integrity of the cover and to evaluate the cover's capability to promote runoff and prevent ponding.

The following elements must be monitored annually and reported to the Lahontan Water Board in accordance with the schedule specified in this MRP, Section IV.A.3. Maintenance and repairs to the cover must be performed in a timely manner following discovery of the problem in accordance with the procedures outlined in the approved FCPCMP.

- 1. An evaluation of the condition of the vegetative/protective cover surface, including areas requiring replanting/reseeding, if needed.
- 2. Eroded portions of the cover surface requiring regrading, repair, or (for areas where the problem persistently reoccurs) installation of additional erosion control measures.
- 3. An evaluation of the ability of the cover to promote runoff and prevent ponding.
- 4. Areas where there is evidence of ponding or lacking free drainage.

- 5. An evaluation of the cover thickness, including areas requiring regrading and additional soil cover, to maintain the as-built final cover over the entire surface of the Landfill.
- 6. Areas of the cover surface damaged by equipment operation.
- 7. Localized areas identified in the five-year iso-settlement survey as having sustained repeated or severe differential settlement.
- 8. Prior to conducting periodic grading repairs and maintenance of the cover surface, the Discharger must note on a map of the Landfill the approximate location and outline of any areas where differential settlement is visually obvious. Map notations and delineations made pursuant to this paragraph need not be surveyed, so long as all areas where differential settlement was visually identifiable prior to regrading can be relocated. Such notation and delineation must be made by, or under the supervision of, a California-licensed professional geologist or civil engineer.

#### III. DATA ANALYSES

All data analyses methods (statistical and non-statistical) must meet the requirements of CCR, title 27, sections 20415, subdivisions (e)(8) and (9).

# A. <u>Site-Specific Statistical Analysis Method</u>

To determine whether there is "measurably significant" evidence of any new releases from the Landfill, evaluation of data will be conducted using statistical methods. For detection monitoring, the Discharger must use statistical methods to analyze COCs and monitoring parameters that exhibit concentrations that equal or exceed their respective concentration limit. The Discharger may propose and use any data analyses that meets the requirements of CCR, title 27, section 20415, subdivision (e)(7). Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance (USEPA, 2009) or subsequent versions may also be used to select the statistical test to use for comparing detection monitoring data to background monitoring data.

# B. Non-Statistical Analysis Methods

To determine if any new releases have occurred from the Landfill, evaluation of data will also be conducted using non-statistical methods. Non-statistical analyses are as follows.

#### 1. Physical Evidence

Physical evidence can include, but is not limited to, unexplained stress in biological communities such as vegetation loss, soil discoloration, or groundwater mounding. Each semi-annual and annual report must comment on such physical elements.

#### 2. Time-Series Plots

Non-statistical evidence of a release may include trends of increasing concentrations of one or more constituents over time, as depicted in timeseries plots. Each semi-annual and annual report must include these timeseries plots. Time-series plots are not required for parameters that have never been detected above their MDL (as specified by the applicable USEPA method).

#### IV. REPORTING REQUIREMENTS

The Discharger must comply with the following reporting requirements.

#### A. Submittal of Electronic Laboratory Data

All water, soil, and soil-gas laboratory data collected during the corresponding reporting period (Table 3), must be submitted electronically to the Lahontan Water Board by uploading to the State Water Board's GeoTracker system, per the following schedule. The laboratory data must be uploaded in Electronic Data Format (EDF).

Table 3. Laboratory Reporting Schedule

Sampling and Reporting Period	EDF Upload Due Date
January 1 – June 30	July 30
July 1 – December 31	January 30

#### B. Scheduled Reports to be Filed with the Lahontan Water Board

The following periodic reports, including all water, soil, soil vapor, solid waste monitoring data collected during the corresponding reporting period, must be submitted electronically to the Lahontan Water Board by uploading to the State Water Board's GeoTracker system, per the schedule presented in Table 4. The laboratory data must be uploaded in Electronic Deliverable Format (EDF).

Table 4. Monitoring and Reporting Schedule

MONITORING REPORTING SCHEDULE					
Report Name Sampling and Reporting Period Report Do Date 1					
First Semi-Annual Monitoring Report	January 1 – June 30	August 15			
Second Semi-Annual Monitoring Report	July 1 – December 31	February 15			
Annual Monitoring Report	January 1 – December 31	March 30			
Annual Cover Performance Report	January 1 – December 31	March 30			

Five-Year Iso-Settlement Map <sup>2</sup>	January 1 – December 31	March 30
Five-Year Constituent of Concern Report <sup>3</sup>	January 1 – June 30 July 1 – December 31	August 15 February 15

#### Notes:

- <sup>1</sup> Reports with same due dates may be combined.
- <sup>2</sup> The first five-year iso-settlement map is scheduled to be submitted to the Lahontan Water Board no later than March 30, 2030.
- <sup>3</sup> Sampling and reporting period will alternate between January 1 through June 30 for one five-year sampling event and July 1 through December 31 for the next five-year sampling event. The first five-year report is due August 15, 2026.

#### 1. <u>Semi-Annual Monitoring Reports</u>

Each semi-annual report must include, but not be limited to, the following information.

- a. All data collected during the reporting period in accordance with the accepted SAP for the monitoring systems described in MRP Section II.A.
- b. Tabulated results of sampling and laboratory analyses for each groundwater monitoring point, including historical (last five years at minimum) and current reporting period data, as well as the concentration limit for each monitoring parameter and an identification of each sample that exceeds its respective concentration limit by a measurably significant amount at any given monitoring point.
- c. Tabulated results of sampling and laboratory analyses for each unsaturated zone monitoring point, including historical (last five years at minimum) and current reporting period data.
- d. A map and/or aerial photograph showing the Landfill perimeter and ancillary facilities as well as locations of all monitoring points, observation stations, and the surface trace of the point of compliance.
- e. Calculate and illustrate on a map and/or aerial photograph the static groundwater surface elevation (feet above mean sea level) in each groundwater monitoring well, the groundwater gradient (feet/feet) and the direction of the groundwater gradient beneath and around the Landfill, the velocity of groundwater flow (feet/year), and the current groundwater isocontours for that monitoring period.
- f. Copies of all field monitoring and well sampling data sheets.
- g. Time-series plots of the analytical results from the groundwater and

unsaturated zone monitoring at each monitoring point for each COC detected during the monitoring period as well as available historical data (minimum of last ten years of data). Time-series plots must include, as lines, the COCs concentration limit as derived in accordance with the WQPS for the respective COC/monitoring point pair, as well as the PQL and MDL for the analytical method used.

- h. Data collected in accordance with the accepted Septage Management Plan for the Landfarm.
- Data collected in accordance with accepted load-checking program for the Landfill.
- j. Information on the effectiveness of the load-checking program for the Landfill.
- k. A letter transmitting the essential points of each report, including a discussion of any violations found since the last report was submitted and describing actions taken or planned for correcting those violations.
  - i. If the Discharger has previously submitted a detailed time schedule for correcting violations, a reference to the correspondence transmitting this schedule will suffice.
  - ii. If no violations have occurred since the last submittal, this must be stated in the letter of transmittal.

#### 2. Annual Monitoring Reports

Annual monitoring reports must be submitted to the Lahontan Water Board no later than <u>March 30</u> of each year and may be combined with the second semi-annual monitoring report for the same reporting year. The report must include the items described in the General Provisions for Monitoring and Reporting (Attachment C to this MRP), and the following information.

- a. All data collected in accordance with this MRP, Sections II.B through II.C.
- b. A list of all monitoring point/monitoring parameter pairs (pairs), by medium, which have exhibited a verified measurably significant increase, together with the respective date (for each) when that increase occurred. Any pairs that have shown an increase within that (prior) year must be indicated in the table, such as the use of bold-underlining of the data. In addition, by medium, list any non-monitoring parameter COCs that, during testing that year (tested every five years), have exceeded their respective concentration limit by a measurably significant amount and, as a result, have become

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monitoring parameters, together with the date when the transition occurred.

- c. Two maps, one for each semi-annual monitoring period of the last reporting year, showing the groundwater isocontours determined for that monitoring period, the Landfill and all ancillary facilities, all groundwater and unsaturated zone monitoring points, and the surface trace of the point of compliance.
- d. Calibration methods and any discrepancies of any meters used for field parameter evaluations after calibration is performed.
- e. An evaluation of the effectiveness of both the groundwater and unsaturated zone monitoring programs and any proposed modifications necessary to improve the monitoring programs.
- f. A brief chronological summary of dates of any operational problems and maintenance activities that may impact water quality at the site.
- g. The compliance record and the corrective actions taken or planned, which may be needed to bring the Landfill into full compliance with the discharge requirements.
- h. Evidence that adequate financial assurance for post-closure maintenance, and corrective action is still in effect. Evidence may include a copy of the renewed financial instrument or a copy of the receipt for payment of the financial instrument.
- i. Evidence that the financial assurance amount is adequate or increase the amount of financial assurance by an appropriate amount if necessary, due to inflation, a change in the approved closure plan, or other unforeseen events.
- j. The Discharger must review the Final Closure Post-Closure Maintenance Plan annually to determine if significant changes in the operation of the Landfill warrant an update to the plan. Proposed changes to the plan must be outlined in the annual report.

#### 3. Annual Cover Performance Reports

#### a. Annual Cover Performance

Annual final cover performance reports must be submitted to the Lahontan Water Board no later than <u>March 30</u> of each year and may be combined with the annual monitoring report. Annual final cover reports must include, but not be limited to, the following information.

- i. All data collected in accordance with the MRP, Section II.C
- ii. A description of the condition of the final cover materials and a discussion regarding any settlement or soil cover erosion, which have occurred, and the capability of the cover to promote runoff and prevent ponding.
- iii. Where settlement, erosion, or other damage to the cover is noted, the report must indicate the actions taken to repair the cover material, the date(s) those actions were taken, and what action are being taken to prevent reoccurrence.

#### b. <u>Five-Year Iso-Settlement Map</u>

Pursuant to CCR, title 27, section 21090(2)(2), at least once every five years, the Discharger must prepare and submit to the Lahontan Water Board an iso-settlement map accurately depicting the estimated total change in elevation of the final cover surface. The five-year iso-settlement map must be submitted to the Lahontan Water Board no later than **March 30** of the year in which it is due and should be included with the annual final cover performance report due the same reporting year. The first five-year iso-settlement map is scheduled to be submitted to the Lahontan Water Board no later than **March 30**, **2030**. The map must include, at minimum, the following information.

- i. The total lowering of the surface elevation of the final cover, relative to the baseline topographic map prepared at time of closure (as-built condition).
- ii. Indicate all areas where repeated and severe differential settlement has occurred since closure.
- iii. The map shall be drawn to the same scale and contour interval as the baseline as-built topographic map but show the current topography of the final cover and include overprinted isopleths indicating the total settlement to-date.

#### 4. Five-Year Constituent of Concern Monitoring and Reporting Program

Pursuant to CCR, title 27, section 20420, subdivision (g), every five years the Discharger must sample for COCs. Groundwater samples must be collected and submitted for laboratory analyses at all monitoring points once every five years for all monitoring parameters and COCs listed in Appendix I and Appendix II, Title 40, Code of Federal Regulations (40 CFR), Part 258 (Attachment A). Successive monitoring efforts must be carried out alternately during January 1 through June 30 of one five-year COC sampling event and July 1 through December 31 of the next five-year

COC sampling event, and every fifth year, thereafter. The five-year COC sampling event must be reported no later than 45 days following the monitoring period. The last five-year sampling event occurred in December 2021 and reported in 2022; therefore, the next five-year sampling event is scheduled to occur in the first half of 2026 and reported to the Lahontan Water Board no later than **August 15**, **2026**.

# 5. <u>One-Time Monitoring for Per- and Polyfluoroalkyl Substances Monitoring and Reporting Program</u>

Pursuant to CWC, section 13267, the Discharger must conduct a one-time monitoring event to sample for per- and polyfluoroalkyl substances (PFAS). Samples must be collected and submitted for laboratory analyses at all monitoring points for all monitored media for all PFAS analytes listed in Attachment D. The one-time PFAS sampling event is to occur in **second half of 2026** and reported to the Lahontan Water Board in the second semi-annual monitoring report due **no later than 90 days** following Lahontan Water Board Acceptance of the PFAS Work Plan.

## C. Unscheduled Reports to be Filed with the Lahontan Water Board

The following reports must be submitted to the Lahontan Water Board as specified below.

#### 1. Notice of Tentative Release from the Landfill

Should the statistical or non-statistical data analyses indicate, for a given COC, that a new release is tentatively identified, the Discharger must follow these requirements.

# a. <u>Physical or Measurably Significant Evidence of a Release from the </u>Landfill

The Discharger must immediately notify the Lahontan Water Board verbally whenever a determination is made that there is significant physical or "measurably significant" evidence of a release from the Landfill. This verbal notification must be followed by written notification via certified mail within seven days of such determination. Upon such notification, the Discharger may initiate verification procedures or demonstrate that another source other than the Landfill caused evidence of a release in accordance with this MRP, Section IV.B.1.b.

The notification must include the following information:

- i. The potential source of the release;
- ii. General information including the date, time, location, and

cause of the release:

- iii. An estimate of the flow rate and volume of waste involved;
- iv. A procedure for collecting samples and description of laboratory tests to be conducted;
- v. Identification of any water body or water-bearing media affected or threatened;
- vi. A summary of proposed actions; and
- vii. For a physical evidence of a release the physical factors that indicate evidence of a release; or
- viii. For a measurably significant evidence of a release the monitoring parameters and/or COCs that are involved in the measurably significant evidence of a release from the Landfill.

# b. Other Source That May Cause Evidence of a Release from the Landfill

The Discharger may make a demonstration that a source other than the Landfill caused evidence of a release. For this case, the Discharger must notify the Lahontan Water Board of the intention to make this demonstration. The notification must be sent to the Lahontan Water Board by certified mail within 7 days of determining physical or measurably significant evidence of a release.

#### 2. Evaluation Monitoring

The Discharger must, within 90 days of verifying a release, submit a technical report and amended report of waste discharge to establish an EMP pursuant to CWC, section 13267, subdivision (b), proposing an EMP meeting the provisions of CCR, title 27, section 20420, subdivision (k)(5). If the Discharger decides not to conduct verification procedures or decides not to make a demonstration that a source other than the Landfill is responsible for the release, the release will be considered verified. The EMP must include the following information:

a. COC Concentrations – the maximum concentration of each COC at each monitoring point as determined during the most recent COC sampling event (i.e., under CCR, title 27, section 20420, subdivision (g) or (k)[1]). Any COC that exceeds its concentration limit is to be retested at that monitoring point. Should the results of the retest verify that the COC is above the concentration limit, then that COC will become a monitoring parameter at that monitoring point;

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- b. Proposed Monitoring System Changes any proposed changes to the groundwater and unsaturated zone monitoring systems necessary to meet the provisions of CCR, title 27, section 20425;
- c. Proposed Monitoring Changes any proposed additions or changes to the monitoring frequency, sampling and analytical procedures or methods, or statistical methods used at the Landfill necessary to meet the provisions of CCR, title 27, section 20425; and
- d. Proposed Delineation Approach a detailed description of the measures to be taken by the Discharger to assess the nature and extent of the release from the Landfill.

### 3. <u>Engineering Feasibility Study Report</u>

Within 180 days of verifying the existence of any new release, the Discharger must submit a revised Engineering Feasibility Study report meeting CCR, title 27, section 20420, subdivision (k)(6), proposing corrective action measures that could be taken to achieve background concentrations for all COCs involved in the release. This report will be the basis for a later expanded Engineering Feasibility Study submitted under the EMP, as specified in CCR, title 27, section 20425, subdivision (b).

#### 5. Monitoring Well Logs

All monitoring wells (including groundwater and unsaturated zone monitoring wells) and all other borings installed to satisfy the requirements of this MRP must be drilled by a licensed drilling contractor and must be logged during drilling under the direct supervision of either a California-licensed professional geologist or civil engineer with expertise in stratigraphic well logging, as indicated in CCR, title 27, section 20415, subdivision (e)(2). Such logs must be submitted to the Lahontan Water Board within 90 days following completion of fieldwork.

#### 6. Significant Earthquake Event

After a significant or greater earthquake event at or near the Facility, the Discharger must notify the Lahontan Water Board within 48 hours, and within 45 days submit to the Lahontan Water Board a detailed written post-earthquake report describing any physical damages to the containment features or groundwater and/or unsaturated zone monitoring systems or to

<sup>&</sup>lt;sup>1</sup> A significant earthquake is a seismic event classified according to the United States Geological Survey (USGS) Earthquake Hazard Program as a moderate earthquake measuring between 5 and 5.9 on the Richter scale, or higher. The Discharger may use the Modified Mercalli Intensity Scale VI or higher for equivalent ground shaking generated by a significant earthquake of Richter magnitude 5.0 or higher as contained with the USGS Earthquake Hazard Program Magnitude/Intensity Comparison chart found at <a href="https://earthquake.usgs.gov">https://earthquake.usgs.gov</a>.

report no damage to the Facility was sustained. The Discharger must closely examine the WMU and appurtenant piping, inspect the slope conditions, drainage control system, and surface grading for signs of cracking or depressed/settled areas following the earthquake event. If cracking or depressed areas are identified, the Discharger must make repairs to those areas within 30 days from the date of the earthquake event. Repairs and maintenance must be consistent with Board Order No. R6-2025-TENTATIVE.

#### 7. Extreme Weather Event

After an extreme weather event<sup>2</sup> at or near the Facility, the Discharger must notify the Lahontan Water Board within 48 hours, and within 45 days submit to the Lahontan Water Board a detailed written post-extreme weather event report describing any physical damages to the containment features or groundwater and/or unsaturated zone monitoring systems or to report no damage to the Facility was sustained. The Discharger must closely examine the WMU and appurtenant piping, inspect the slope conditions, drainage control system, and surface grading for signs of erosion, cracking, or depressed/settled areas following the extreme weather event. If erosion, cracking, or depressed areas are identified, the Discharger must make repairs to those areas within 30 days from the date of the extreme weather event. Repairs and maintenance must be consistent with Board Order No. R6-2025-TENTATIVE.

#### D. <u>Technical Reports</u>

Pursuant to CWC, section 13267, subdivision (b):

## 1. Monitoring Systems Installation Report

No later than 90 days following completion of construction of a monitoring system or monitoring system component, the Dischargers must submit a technical report discussing the installation of the monitoring system or component. The report must summarize all work activities associated with the installation of the monitoring system or component. The report must be certified by a California professional civil engineer or a California

<sup>&</sup>lt;sup>2</sup> An extreme weather event refers to a weather phenomenon with enough intensity to cause physical damage to the Facility or any of its infrastructure including containment features or groundwater and/or unsaturated zone monitoring systems or disruption in wastewater conveyance or treatment systems. Extreme weather refers to unusual, severe, or unseasonal weather conditions, and can include extreme heat, excessive or unusual precipitation and flooding, wildfires, severe wind, and extended droughts.

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professional geologist. It must contain sufficient information to verity that the construction was in accordance with State and/or County standards.

### E. <u>General Provisions</u>

The Discharger must comply with Attachment C, "General Provisions for Monitoring and Reporting," dated September 1, 1994, which is attached to and made part of this MRP.

## F. Failure to Furnish Reports

Any person failing or refusing to furnish technical or monitoring reports or falsifying any information provided therein is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation pursuant to CWC, section 13268.

### G. Violations

If monitoring data indicate a violation of a specific requirement in these WDRs, the Discharger must report the violation in the scheduled report for the corresponding reporting period and provide information indicating the cause of violation(s) and the action taken or planned to bring the discharge into compliance.

#### H. Electronic Reporting Requirements

Pursuant to CCR, title 23, section 3890, the Discharger must submit reports, including soil, soil-gas, and water data, prepared for the purpose of subsurface investigation or remediation of a discharge of waste to land subject to CCR, title 27, Division 2, electronically over the internet to the State Water Resources Control Board's GeoTracker system. This requirement is in addition to, and not superseded by, any other applicable reporting requirement. The Discharger must provide the monitoring report to the Lahontan Water Board, as specified in this MRP, and upload the full monitoring report into GeoTracker, as stipulated by CCR, title 23.

For all other types of documents and correspondence, please send to the Lahontan Water Board's email address at Lahontan@waterboards.ca.gov and include the WDID No. and Facility name in the subject line.

Ordered by:		Dated:	
	BEN LETTON EXECUTIVE OFFICER		

Attachments: A. Water Quality Monitoring Program

B. Monitoring Network, Benton Crossing Class III Landfill

- C. General Provisions for Monitoring and Reporting, September 1, 1994
- D. PFAS Monitoring Program

# ATTACHMENT A - WATER QUALITY MONITORING PROGRAM<sup>1</sup>

	UNSATURATED ZONE					
Parameter		Units Sampling Frequency		Reporting Frequency		
		Soil-Pore G	as			
Field I	Parameters <sup>2</sup>					
Atmos	pheric Pressure	Inches of mercury	Semi-Annual	Semi-Annual		
Carbo	n Dioxide	Percent	Semi-Annual	Semi-Annual		
Nitrog	en	Percent	Semi-Annual	Semi-Annual		
Oxyge	n	Percent	Semi-Annual	Semi-Annual		
Metha	ne	Percent	Semi-Annual	Semi-Annual		
Const	ituents of Concern					
	Carbon Dioxide	Parts per billion by volume		Semi-Annual		
ing	Methane	Parts per billion by volume	Conditional to methane field parameter results <sup>3</sup>	Semi-Annual		
Monitoring Parameters	Nitrogen	Parts per billion by volume		Semi-Annual		
Mo	Oxygen	Parts per billion by volume		Semi-Annual		
	Volatile Organic Compounds	Parts per billion by volume		Semi-Annual		
Volatil	e Organic Compounds	Parts per billion by volume	5 year	5 year		
		Parts per billion by volume	5 year	5 year		

GROUNDWATER					
Parameter	Units Sampling Frequency		Reporting Frequency		
Field Parameters					
Depth to Groundwater	feet below ground surface	Semi-Annual	Semi-Annual		
Groundwater Elevation	feet above mean sea level	Semi-Annual	Semi-Annual		
Dissolved Oxygen	milligrams/Liter	Semi-Annual	Semi-Annual		
Electrical Conductivity	μmhos/cm	Semi-Annual	Semi-Annual		
рН	pH units	Semi-Annual	Semi-Annual		
Temperature	degrees Fahrenheit or Celsius	Semi-Annual	Semi-Annual		
Turbidity	NTU	Semi-Annual	Semi-Annual		

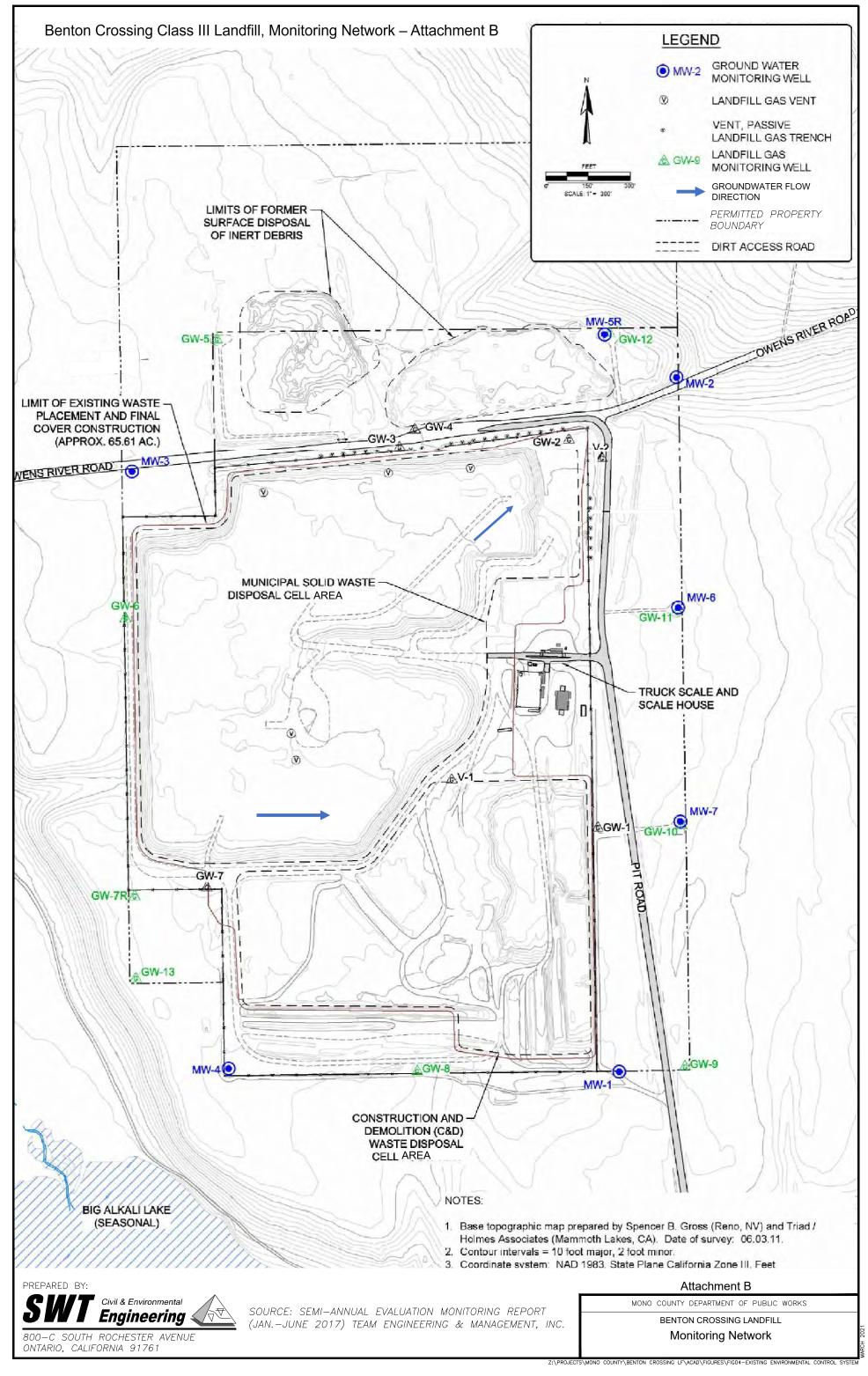
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PFAS <sup>6</sup> nanograms/Liter One-time One-time			micrograms/Liter	5 year	5 year		
	PFAS <sup>6</sup>		nanograms/Liter	One-time	One-time		

Notes:

NTU - Nephelometric Turbidity Units µmhos/cm - micromhos per centimeter

PFAS - Per- and Polyfluorinated Alkyl Substances

- <sup>1</sup> Laboratory analytical data is uploaded to GeoTracker in accordance with the sampling frequency.
- <sup>2</sup> Field screened using a CES-LANDTEC GEM 2000 Gas Analyzer or equivalent field instrument.
- <sup>3</sup> If the threshold concentration of methane is detected above five percent by volume in any of the gas monitoring wells, samples will be collected and analyzed for the monitoring parameters listed.
- <sup>4</sup> As defined in Appendix I, 40 Code of Federal Regulations (CFR), part 258.
- <sup>5</sup> As defined in Appendix II, 40 CFR, part 258.
- <sup>6</sup> PFAS sampling and analysis in accordance with MRP R6-2025-TENTATIVE, Attachment D.



# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

# GENERAL PROVISIONS FOR MONITORING AND REPORTING

#### 1. SAMPLING AND ANALYSIS

- a. All analyses shall be performed in accordance with the current edition(s) of the following documents:
  - i. Standard Methods for the Examination of Water and Wastewater
  - ii. Methods for Chemical Analysis of Water and Wastes, EPA
- b. All analyses shall be performed in a laboratory certified to perform such analyses by the California State Department of Health Services or a laboratory approved by the Regional Board Executive Officer. Specific methods of analysis must be identified on each laboratory report.
- c. Any modifications to the above methods to eliminate known interferences shall be reported with the sample results. The methods used shall also be reported. If methods other than EPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Regional Board prior to use.
- d. The Discharger shall establish chain-of-custody procedures to insure that specific individuals are responsible for sample integrity from commencement of sample collection through delivery to an approved laboratory. Sample collection, storage, and analysis shall be conducted in accordance with an approved Sampling and Analysis Plan (SAP). The most recent version of the approved SAP shall be kept at the facility.
- e. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall insure that both activities will be conducted. The calibration of any wastewater flow measuring device shall be recorded and maintained in the permanent log book described in 2.b, below.
- f. A grab sample is defined as an individual sample collected in fewer than 15 minutes.
- g. A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period at equal intervals. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling. The sampling period shall equal the discharge period, or 24 hours, whichever period is shorter.

## 2. <u>OPERATIONAL REQUIREMENTS</u>

#### a. Sample Results

Pursuant to California Water Code Section 13267(b), the Discharger shall maintain all sampling and analytical results including: strip charts; date, exact place, and time of sampling; date analyses were performed; sample collector's name; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

#### b. Operational Log

Pursuant to California Water Code Section 13267(b), an operation and maintenance log shall be maintained at the facility. All monitoring and reporting data shall be recorded in a permanent log book.

#### 3. REPORTING

- a. For every item where the requirements are not met, the Discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and shall submit a timetable for correction.
- b. Pursuant to California Water Code Section 13267(b), all sampling and analytical results shall be made available to the Regional Board upon request. Results shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.
- c. The Discharger shall provide a brief summary of any operational problems and maintenance activities to the Board with each monitoring report. Any modifications or additions to, or any major maintenance conducted on, or any major problems occurring to the wastewater conveyance system, treatment facilities, or disposal facilities shall be included in this summary.
- d. Monitoring reports shall be signed by:
  - i. In the case of a corporation, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;
  - ii. In the case of a partnership, by a general partner;
  - iii. In the case of a sole proprietorship, by the proprietor; or

- iv. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
- e. Monitoring reports are to include the following:
  - i. Name and telephone number of individual who can answer questions about the report.
  - ii. The Monitoring and Reporting Program Number.
  - iii. WDID Number.

#### f. Modifications

This Monitoring and Reporting Program may be modified at the discretion of the Regional Board Executive Officer.

#### 4. NONCOMPLIANCE

Under Section 13268 of the Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation under Section 13268 of the Water Code.

x:PROVISONS WDRS

file: general pro mrp

# ATTACHMENT D - PER- AND POLYFLUORINATED ALKYL SUBSTANCES (PFAS) MONITORING PROGRAM

# TARGET REPORTING LIMITS FOR LC/MS/MS ANALYSIS OF PER- AND POLYFLUORINATED ALKYL ACIDS BY DEPARTMENT OF DEFENSE QUALITY SYSTEM MANUAL (VERSION 5.1 OR LATER)

Chemical Name/ Abbreviation(s)	GeoTracker PARLABEL	Chemical Abstracts Service (CAS) No.	Aqueous: Non-Drinking Water (ng/L)	Solid (ng/g)
Perfluoroalkyl carboxylic acids		·		
Perfluorobutanoic acid (PFBA)	PFBTA	375-22-4	6.4	0.8
Perfluoropentanoiic acid (PFPeA)	PFPA	2706-90-3	3.2	0.4
Perfluorohexanoic acid (PFHxA)	PFHA	307-24-4	1.6	0.2
Perfluoroheptanoic acid (PFHpA)	PFHPA	375-85-9	1.6	0.2
Perfluorooctanoic acid (PFOA)	PFOA	335-67-1	1.6	0.2
Perfluorononanoic acid (PFNA)	PFNA	375-95-1	1.6	0.2
Perfluorodecanoic acid (PFDA)	PFNDCA	335-76-2	1.6	0.2
Perfluoroundecanoic acid (PFUnDA, PFUda, PFUnA)	PFUNDCA	2058-94-8	1.6	0.2
Perfluorododecanoic acid (PFDoDA, PFDoA)	PFDOA	307-55-1	1.6	0.2
Perfluorotridecanoic acid (PFTrDA)	PFTRIDA	72629-94-8	1.6	0.2
Perfluorotetradecanoic acid (PFTeDA, PFTA)	PFTEDA	376-06-7	1.6	0.2
Perfluorohexadecanoic acid (PFHxDA)	PFHXDA	67905-19-5	4	1
Perfluorooctadecanoic acid (PFODA)	PFODA	16517-11-6	1.6	0.2
Perfluoroalkyl sulfonic acids	·	·		
Perfluorobutane sulfonic acid (PFBS)	PFBSA	375-73-5	1.6	0.2
Perfluoropentane sulfonoic acid (PFPeS)	PFPES	2706-91-4	1.6	0.2
Perfluorohexane sulfonic acid (PFHxS)	PFHXSA	355-46-4	1.6	0.2
Perfluoroheptane sulfonic acid (PFHpS)	PFHPSA	375-92-8	1.6	0.2
Perfluorooctane sulfonic acid (PFOS)	PFOS	1763-23-1	1.6	0.2
Perfluorononane sulfonic acid (PFNS)	PFNS	68259-12-1	1.6	0.2

Chemical Name/ Abbreviation(s)	GeoTracker PARLABEL	Chemical Abstracts Service (CAS) No.	Aqueous: Non-Drinking Water (ng/L)	Solid (ng/g)
Perfluoroalkyl sulfonic acids				
Perfluorodecane sulfonic acid (PFDS)	PFDSA	335-77-3	1.6	0.2
Perfluorododecanesulfonic acid (PFDoS)	PFDOS	79780-39-5	4.3	1
Fluorotelomer sulfonic acids				
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	4:2FTS	757124-72-4	6.4	0.8
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	6:2FTS	27619-97-2	6.4	0.8
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	8:2FTS	39108-34-4	6.4	0.8
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	10:2FTS	120226-60-0	7	1
Perfluorooctane sulfonamides				
Perfluorooctanesulfonamide (PFOSA, PFOSAm, FOSA)	PFOSA	754-91-6	1.6	0.2
N-Methyl perfluorooctane sulfonamide (MeFOSA, MeFOSAm)	MEFOSA	31506-32-8	1.6	0.2
N-Ethyl perfluorooctane sulfonamide <sup>2</sup> (EtFOSA, EtFOSAm)	ETFOSA	4151-50-2	1.6	0.2
Perfluorooctane sulfonamidoacetic acids				
N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	NMEFOSAA	2355-31-9	1.6	0.2
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	NETFOSAA	2991-50-6	1.6	0.2
Perfluorooctane sulfonamide ethanols				
N-Methyl perfluorooctane sulfonamide ethanol² (MeFOSE)	MEFOSE	24448-09-7	16	2.0
N-Ethyl perfluorooctane sulfonamide ethanol (EtFOSE)	ETFOSE	1691-99-2	16	2.0
Per- and Polyfluoroether carboxylic acids	<u>.</u>	<u>.</u>		
Hexafluoropropylene Oxide Dimer Acid² (HFPO-DA)	HFPA-DA	13252-13-6	6.4	0.8
4,8-Dioxa-3H-perfluorononanoic acid² (ADONA)	ADONA	919005-14-4	6.4	0.8
Per- and Polyfluoroether carboxylic acids				
Perfluoro-3-methoxypropanoic acid² (PFMPA)	PFMPA	377-73-1	3.2	0.4
Perfluoro-4-methoxybutanoic acid² (PFMBA)	PFMBA	863090-89-5	3.2	0.4
Nonafluoro-3,6-dioxaheptanoic acid² (NFDHA)	NFDHA	151772-58-6	3.2	0.4

Chemical Name/ Abbreviation(s)	GeoTracker PARLABEL	Chemical Abstracts Service (CAS) No.	Aqueous: Non-Drinking Water (ng/L)	Solid (ng/g)
Ether sulfonic acids				
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid² (9-CI-PF3ONS)	9CIPF3ONS	756426-58-1	6.4	0.8
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid² (11-Cl-PF3OUdS)	11CIPF3OUdS	763051-92-9	6.4	0.8
Perfluoro(2-ethoxyethane) sulfonic acid² (PFEESA)	PFEESA	113507-82-7	3.2	0.4
Fluorotelomer carboxylic acids				
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	3:3FTCA	356-02-5	8.0	1.0
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5:3FTCA	914637-49-3	40	5.0
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7:3FTCA	812-70-4	40	5.0

#### Notes:

The laboratory must use the minimum standard data qualifiers provided in the Department of Defense (DoD) Quality System Manual (QSM). These data qualifiers must be included in the analytical electronic data format (EDF) submittal into GeoTracker. Refer to GeoTracker's <u>data dictionary</u> for the valid values for data qualifiers. A quick search option for data qualifiers (EDF/LNOTE), and other fields within the EDF submittal is available at <a href="https://geotracker.waterboards.ca.gov/searchyvl.asp">https://geotracker.waterboards.ca.gov/searchyvl.asp</a>.

ng/L – nanogram per liter ng/g – nanogram per gram

The list of PFAS analytes on this table is a compilation of all compounds that could be included in a California Water Board Investigatory Order or another Water Board regulatory directive and is subject to change.

<sup>&</sup>lt;sup>1</sup> These are the target reporting limits for the California Water Board Investigatory Orders and represent the highest reporting limits acceptable for reporting purposes. If a laboratory's reporting limit is lower than the target reporting limits listed, then the laboratory should report data using the laboratory's reporting limit.

<sup>&</sup>lt;sup>2</sup> The acceptable quality control limits for these analytes are not listed in Table C-44 Method PFAS by LCMSMS Compliant with QSM Table B-15 Aqueous Matrix or Table C-45 Method PFAS by LCMSMS Compliant with QSM Table B-15 Solid Matrix of the <u>DoD Quality Systems Manual (QSM)</u>, <u>Version 5.3</u>. If a Water Board regulatory directive requires the analysis of these analytes, the laboratory must use in-house acceptance criteria for control samples for these analytes per the DoD QSM.