CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2018-0069

WASTE DISCHARGE REQUIREMENTS FOR BELL-CARTER OLIVE COMPANY, INC. AND CITY OF CORNING INDUSTRIAL WASTEWATER TREATMENT PLANT CLASS II SURFACE IMPOUNDMENTS OPERATION TEHAMA COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Central Valley Water Board) finds that:

1. Bell-Carter Olive Company, Inc. (facility owner and operator) and the City of Corning (landowner), hereinafter referred to jointly as "Discharger", own and operate the Industrial Wastewater Treatment Plant (Facility) about four miles east of the City of Corning, in Section 20, T24N, R2W, MDB&M, as shown in Attachment A. The Facility is an industrial wastewater treatment plant, with seven Class II surface impoundments, regulated under authority given in Water Code section 13000 et seq.; and California Code of Regulations, title 27 ("Title 27"), section 20005 et seq.

2. The following documents are attached to this Order and hereby incorporated into and made a part of this Order by reference:

   a. Attachment A – Site Location Map;

   b. Attachment B – Site Plan and Monitoring Network;

   c. Information Sheet; and

   d. Standard Provisions and Reporting Requirements ("SPRRs"), dated April 2016

3. The Facility is on a 46-acre property at Gardiner Ferry Road, Corning. The existing lined surface impoundment area is approximately 27 acres. The existing surface impoundment area is shown in Attachment B. The Facility is comprised of Assessor's Parcel Number ("APN") 75-300-02.

4. On 30 March 2018, the Discharger submitted an amended Report of Waste Discharge ("ROWD") as part of the Joint Technical Document ("JTD") for the surface impoundments. The information in the ROWD/JTD has been used in updating these waste discharge requirements ("WDRs"). The ROWD contains the applicable information required in Title 27. The ROWD/JTD and supporting documents contain information related to this update of the WDRs including:

   a. Newly installed groundwater monitoring wells MW-7 through MW-13; and

b. Newly installed Zenon Membrane Filtration Unit

5. On 15 June 2000, the Central Valley Water Board issued Order 5-00-114 in which the surface impoundment waste management units ("WMUs") at the Facility were classified as Class II units for the discharge of designated waste consisting of olive process and brine-curing wastewater and storm water. This Order continues to classify the surface impoundment units as Class II units in accordance with Title 27.

6. The existing surface impoundment units authorized by this Order are described as follows:

Unit	Area	Liner/LCRS[1] Components	Unit Classification & Status
Pond No. 1	4.5 acres	60 mil[2] HDPE[3] primary liner, underlaid by a geogrid, over a six-inch sand LCRS layer, over a two-foot thick low permeability soil layer with a permeability of $1x10^{-6}$ cm/sec[4] or less	Class II, active
Pond No. 2	2.4 acres	60 mil HDPE primary liner, underlaid by a secondary 40 mil HDPE liner, over a six-inch sand LCRS layer, over a two-foot thick low permeability soil layer with a permeability of $1x10^{-6}$ cm/sec or less	Class II, active
Pond No. 3	2.4 acres	40 mil HDPE primary liner, over a six-inch sand LCRS layer, over a two-foot thick low permeability soil layer with a permeability of $1x10^{-6}$ cm/sec or less	Class II, active
Pond No. 4	3.5 acres	60 mil HDPE primary liner, underlaid by a secondary 40 mil HDPE liner, over a six-inch sand LCRS layer, over a two-foot thick low permeability soil layer with a permeability of $1x10^{-6}$ cm/sec or less	Class II, active

Unit	Area	Liner/LCRS[1] Components	Unit Classification & Status
Pond No. 5	4.2 acres	60 mil HDPE primary liner, underlaid by a secondary 40 mil HDPE liner, over a six-inch sand LCRS layer, over a two-foot thick low permeability soil layer with a permeability of $1x10^{-6}$ cm/sec or less	Class II, active
Pond No. 6	5.5 acres	60 mil HDPE liner, over a six-inch sand LCRS layer, over a two-foot thick low permeability soil layer with a permeability of $1x10^{-6}$ cm/sec or less	Class II, active
Pond No. 7	2.6 acres	60 mil HDPE liner, over a six-inch sand LCRS layer, over a two-foot thick low permeability soil layer with a permeability of $1x10^{-6}$ cm/sec or less	Class II, active

[1] LCRS – Leachate collection and removal system
[2] Mil – One thousandth of an inch
[3] HDPE – High-density polyethylene
[4] cm/sec – Centimeters per second

7. On-site facilities at the Bell-Carter Olive Company, Inc. and City of Corning Industrial Wastewater Treatment Plant include: one influent pump station, three aeration ponds (Pond Nos. 1, 2, and 3) utilizing axial aerators and downdraft mixers, a “Zenon” Membrane Filtration Unit, two sedimentation ponds (Pond Nos. 4 and 5), two storage and polishing ponds (Pond Nos. 6 and 7), thirteen groundwater monitoring wells, and four leachate collection sumps.

8. Effluent from the Facility’s Industrial Wastewater Treatment Plant discharges to the Sacramento River under WDRs Order No. R5-2015-0030 NPDES No. CA0083721.

9. This Order implements the applicable regulations for discharges of liquid waste to land through Prohibitions, Specifications, Provisions, and monitoring and reporting requirements. Prohibitions, Specifications, and Provisions are listed in Sections A through H of these WDRs below, and in the SPRRs. Monitoring and reporting requirements are included in the Monitoring and Reporting Program (“MRP”) R5-2018-0069 and in the SPRRs. In general, requirements that are either in regulation or otherwise apply to all surface impoundments are considered to be “standard” and are therefore in the SPRRs. Any site-specific changes to a requirement in the SPRRs are included in the applicable section (A through H) of these WDRs, and the requirement in the WDRs supersedes the requirement in the SPRRs.

10. Title 27 contains regulatory standards for discharges of liquid waste promulgated by the State Water Board and the California Department of Resources Recovery and Recycling ("CalRecycle"). In certain instances, this Order cites CalRecycle regulatory sections. Title 27, section 20012 allows the Central Valley Water Board to cite CalRecycle regulations from Title 27 where necessary to protect water quality provided it does not duplicate or conflict with actions taken by the Local Enforcement Agency in charge of implementing CalRecycle's regulations.

WASTE CLASSIFICATION AND UNIT CLASSIFICATION

11. The Discharger proposes to continue to discharge designated waste to Class II surface impoundment units including olive process and brine-curing wastewater and storm water. These classified wastes may be discharged only in accordance with Title 27 as required by this Order, or in accordance with WDRs Order R5-2015-0030 (NPDES No. CA0083721).

12. Water Code section 13173, subdivision (b) defines "Designated Waste" to include *"Nonhazardous waste that consists of, or contains, pollutants that, under ambient environmental conditions at a waste management unit, could be released in concentrations exceeding applicable water quality objectives or that could reasonably be expected to affect beneficial uses of the waters of the state as contained in the appropriate state water quality control plan."* Designated waste can be discharged at Class II WMUs which comply with Title 27 and have been approved by the regional board for containment of the particular kind of waste to be discharged.

13. The Discharger provided data in the ROWD for samples collected from the influent received at the Facility. The table below summarizes influent monitoring data collected from 1 January 2013 to 31 December 2017.

Monitoring Parameter	Units	Average value	Range
Flow	million gallons per day	0.538	0 – 2.602
pH	standard units	7.4	3.44 – 12.67
Electrical Conductivity ("EC")	microohms per centimeter	6,500	11 – 14,290
Total Dissolved Solids ("TDS")	milligrams per liter	6,784	480 – 17,300
Biochemical Oxygen Demand ("BOD")	milligrams per liter	4,325	32 – 12,200
Total Suspended Solids ("TSS")	milligrams per liter	961	95 – 3,150
Chemical Oxygen Demand ("COD")	milligrams per liter	7,300	1,700 – 19,000
Iron	micrograms per liter	4,620	312 – 35,500
Sulfate	milligrams per liter	181	8 – 1,804

Monitoring Parameter	Units	Average value	Range
Chloride	milligrams per liter	1,241	92 – 3,910
Sodium	milligrams per liter	1,416	277 – 3,160

14. The Discharger proposes to return leachate to the composite-lined surface impoundment units from which they came. Title 27, section 20340, subdivision (g) requires that leachate be returned to the unit from which it came or be discharged in a manner approved by the regional board.

SITE DESCRIPTION

15. Topography at the site of the Facility ranges from approximately 205 to 210 feet above mean sea level ("MSL") on a flat-lying fluvial plain. The Facility generally slopes to the southeast and drains toward the Sacramento River, which is directly adjacent to the Facility. No springs have been observed within or adjacent to the Facility.

16. Land uses within one mile of the Facility are predominately comprised of agriculture in the form of both cropland and grazing lands. Several single-family residences are located directly to the south of the Facility.

17. There are 127 municipal, domestic, industrial, or agricultural groundwater supply wells within one mile of the Facility.

18. Surface soils in the area belong to the Red Bluff and Riverbank Formations, which are composed of unlithified gravel, sand, silt, and clay. Underlying soils at a depth greater than 100 feet are Pliocene-age volcanics and fluvial deposits of the Tehama Formation. The heterogeneous and layered nature of on-site alluvial soils inhibits vertical movement and promotes lateral flow of fluids.

19. The measured hydraulic conductivity of the native soils underlying the surface impoundment units ranges between $1.2x10^{-3}$ and $1.3x10^{-4}$ cm/sec.

20. Based on a site-specific seismic analysis, the controlling maximum credible earthquake ("MCE") for the Facility is a moment of magnitude 6.0 event along the Oroville Fault Zone of the Holocene Fault at a closest rupture distance of 47 miles from the Facility. It is estimated that a MCE event would produce a peak ground acceleration of 0.364g at the Facility with a return period of 475 years.

21. The Facility receives an average of 23 inches of precipitation per year as measured at the NDC Station 047292 in Red Bluff, CA. The mean pan evaporation is 57 inches per year.

22. The 1,000-year, 24-hour precipitation event for the Facility is estimated to be 6.6 inches, based on Department of Water Resources' bulletin 195 entitled *Rainfall Depth-Duration-Frequency for California*, revised November 1982, updated August 1986.

23. The Facility is within a 100-year flood plain based on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map, Community-Panel Number 1490 or 1775 of Map Number 06103C1490H. Approximately half of Pond No. 7 is located within the 100-year flood plain. However, the elevation at the top of the berm surrounding Pond No. 7 is well above the perceived flood level, with the pond protected from inundation or washout from the 100-year flood event.

SURFACE WATER AND GROUNDWATER CONDITIONS

24. The *Water Quality Control Plan for Sacramento and San Joaquin River Basins, Fourth Edition* (Basin Plan), designates beneficial uses, establishes water quality objectives ("WQOs"), and contains implementation plans and policies for all waters of the Basin.

25. Surface water drainage from the Facility is to the Sacramento River.

26. The designated beneficial uses of the Sacramento River, as specified in the Basin Plan, are municipal and domestic supply; agricultural supply; industrial service supply; navigation; hydropower generation; water contact recreation; non-contact water recreation; warm fresh water habitat; cold freshwater habitat; wildlife habitat; migration of aquatic organisms; and spawning, reproduction, and/or early development.

27. The first encountered groundwater ranges from about 25 feet to 50 feet below the native ground surface. Groundwater elevations range from about 160 feet MSL to 185 feet MSL. The groundwater bearing zone is unconfined to semi-confined depending on location and recent hydrologic conditions.

28. Monitoring data indicate background groundwater quality for first encountered groundwater has electrical conductivity (EC) ranging between 340 and 1180 micromhos/cm, with total dissolved solids (TDS) ranging between 240 and 920 milligrams per liter (mg/L).

29. The direction of groundwater flow is generally toward the southeast. The estimated average groundwater gradient and estimated average groundwater velocity are not available. Provision H.6 requires submittal of a Water Quality Protection Standard ("WQPS") Report which will include this information.

30. The designated beneficial uses of the groundwater, as specified in the Basin Plan, are domestic and municipal water supply, agricultural supply, industrial service supply, and industrial process supply.

GROUNDWATER AND UNSATURATED ZONE MONITORING

31. The existing groundwater monitoring network for the surface impoundment units consists of background monitoring wells GWMW-1, GWMW-2 and GWMW-5, and detection monitoring wells GWMW-3, GWMW-4, GWMW-6, GWMW-7, GWMW-8, GWMW-9, GWMW-10, GWMW-

11, GWMW-12 and GWMW-13. The Discharger has no plans to install additional monitoring wells. The monitoring well network is shown on Attachment B.

32. At the time this Order was adopted, the Discharger's detection monitoring program ("DMP") for groundwater at the surface impoundments does not satisfy two Title 27 requirements, including:

    a. The current DMP does not establish detailed procedures for sample collection, preservation, shipment, analysis, and custody control. (See Cal. Code Regs., tit. 27, § 20415, subd. (e)(4).) Provision H.6 requires submittal of a Sample Collection and Analysis Plan.

    b. The current DMP does not have a complete WQPS. (Cal. Code Regs, tit. 27, § 20390.) Concentration limits have not been established for the Facility. Provision H.6 requires submittal of a WQPS Report.

33. Unsaturated zone monitoring has been waived at the Facility due to the shallow groundwater present at the Facility.

34. For a naturally-occurring constituent of concern ("COC"), Title 27 requires concentration limits for each COC be determined as follows:

    a. By calculation in accordance with a statistical method pursuant to Title 27, section 20415, subdivision (e)(8); or

    b. By an alternate statistical method meeting the requirements of Title 27, section 20415, subdivision (e)(8)(E).

35. The Discharger has not submitted a WQPS Report proposing statistical data analysis methods to calculate concentration limits for each monitored constituent in accordance with Title 27. Provision H.6 requires submittal of a WQPS Report for the Facility.

GROUNDWATER CONDITIONS

36. Groundwater conditions at the Facility have historically shown no indications of a release from any of the surface impoundments. The Facility's groundwater monitoring wells are monitored on a quarterly basis for groundwater elevation, EC, pH, TDS, chloride, sodium, nitrate, and COD. Analytical results indicate that monitoring parameter concentrations are generally stable, showing seasonal fluctuations with no apparent trends or patterns. Assessment of a release is hindered by the lack of a WQPS Report.

CLASS II SURFACE IMPOUNDMENTS

37. All seven surface impoundments at the Facility were constructed to meet Class II performance standards and conform to California Code of Regulations, Title 27 requirements. The surface impoundments have the following components:

    a. Pond No. 1 is lined with a 60 mil HDPE primary liner, underlaid by a geogrid, over a six-inch sand LCRS layer, over a two-foot thick low permeability soil layer with a permeability of $1x10^{-6}$ cm/sec or less.

b. Pond No. 3 is lined with a 40 mil HDPE primary liner, over a six-inch sand LCRS layer, over a two-foot thick low permeability soil layer with a permeability of $1x10^{-6}$ cm/sec or less.

c. Pond Nos. 2, 4 and 5 are lined with a 60 mil HDPE primary liner, underlaid by a secondary 40 mil HDPE liner, over a six-inch sand LCRS layer, over a two-foot thick low permeability soil layer with a permeability of $1x10^{-6}$ cm/sec or less.

d. Pond Nos. 6 and 7 are lined with a 60 mil HDPE liner, over a six-inch sand LCRS layer, over a two-foot thick low permeability soil layer with a permeability of $1x10^{-6}$ cm/sec or less

38. Leak detection testing will be conducted at the frequency and according to the triggers identified in the forthcoming Operations and Maintenance Plan. Provision H.6 requires submittal of an Operations and Maintenance Plan.

CONSTRUCTION AND ENGINEERED ALTERNATIVE

39. Title 27, section 20080, subdivision (b) allows the Central Valley Water Board to consider the approval of an engineered alternative to the prescriptive standard. In order to approve an engineered alternative in accordance with Title 27, section 20080, subdivisions (c)(1) or (c)(2), the Discharger must demonstrate that the prescriptive design is unreasonably and unnecessarily burdensome and will cost substantially more than an alternative which will meet the criteria contained in Title 27, section 20080, subdivision (b), or would be impractical and would not promote attainment of applicable performance standards. The Discharger must also demonstrate that the proposed engineered alternative liner system is consistent with the performance goal addressed by the particular prescriptive standard, and provides protection against water quality impairment equivalent to the prescriptive standard in accordance with Title 27, section 20080, subdivision (b)(2).

40. Title 27, section 20310 allows the Central Valley Water Board to specify the design, type of construction, and/or particular manner in which compliance must be met in WDRs or orders for the discharge of waste at surface impoundment facilities.

41. The Discharger has not proposed expansion beyond the existing footprint or the installation of any new surface impoundments. Any such expansion proposed in the future must be done in accordance with Title 27, as required by the Facility Specifications and Construction Specifications contained in this Order.

42. The Facility's LCRS consists of a six-inch sand layer containing plastic webbing material between the inner synthetic and outer clay liner in which a dendritic array of perforated collection pipes is placed. The header from the collection pipe system discharges to a sump consisting of a vertical pipe section sunk to the level of the pond bottom. Pond 1 has a dedicated LCRS sump. Ponds 2 and 3 share a common LCRS sump in which the line from Pond 2 enters from the lower pipe and Pond 3 enters from the upper pipe. Ponds 4 and 5 share a common sump in which the line from Pond 4 enters from the north and the line from pond 5 enters from the east. Ponds 6 and 7 share a common sump in which the line from Pond 6 enters from the upper pipe and the line from Pond 7 enters from the lower pipe. Leachate (leakage) collected in the sumps is returned to the pond of origin by a portable pump with a capacity of approximately 25 gallons per minute ("gpm").

43. The 30 March 2018 ROWD includes a stability analysis for the Facility's surface impoundments pursuant to Title 27, section 21750, subdivision (f)(5). Prior to construction of the surface impoundments, the Discharger's consultant, Geotechnical Consultants, Inc., submitted the 10 March 1986 *Geotechnical Investigation Evaporation Ponds and Pretreatment Facilities, Bell-Carter Foods/Olives Incorporated, City of Corning, California* (the Report). The Report reviewed existing geotechnical, hydrogeologic and seismic information, explored subsurface conditions with the drilling of 13 exploratory borings and the excavation of five test pits, and performed laboratory tests on samples obtained during exploration. The Report concluded that the site of the Facility is geotechnically compatible with the construction of the proposed impoundments.

SURFACE IMPOUNDMENT CLOSURE

44. Title 27, section 21400 provides closure requirements for surface impoundments, which include the following options:

    a. Mandatory clean-closure attempt.

    b. Fallback closure options:

        i. Closure as a landfill, requiring that the surface impoundments with compacted and dewatered waste shall be closed as a landfill pursuant to Title 27, section 21090.

        ii. Closure as a land treatment unit, requiring surface impoundments which contain only decomposable wastes at closure be closed as a land treatment unit pursuant to Title 27, section 21420.

45. The Discharger submitted a December 2000 *Preliminary Closure and Postclosure Maintenance Plan* ("PCPCMP") for closure and post-closure maintenance of all surface impoundment units at the Facility. The Discharger plans to implement clean closure of the Facility. This will involve the disposal of surface impoundment solids, the removal of free liquids, the removal of residual solids, the removal of the primary synthetic liner, the removal of the LCRS layer, the removal of the secondary liner, demolition and grading of the impoundment embankments and the establishment of native vegetation. Soil samples will be collected during the removal of the secondary liner to establish the depth to which contamination exists. Excavation will continue to the depth at which contamination ceases. The Discharger plans to continue operating the Facility for the foreseeable future.

46. This Order approves the proposed final clean closure and requires that a final closure and post-closure maintenance plan, design documents, construction quality assurance ("CQA") plan, and confirmation sampling plan be submitted for review and approval at least two-years prior to actual closure.

SURFACE IMPOUNDMENT POST-CLOSURE MAINTENANCE

47. The Discharger submitted a December 2000 PCPCMP for closure and post-closure maintenance of all surface impoundment units at the Facility. Title 27 does not address specific procedures for post-closure maintenance of Class II surface impoundments. The plan presents a one-year post-closure maintenance period which includes erosion control to prevent damage to

grading completed as part of the closure, and groundwater monitoring to establish no continuing threat to groundwater quality. If it is determined that groundwater quality has been impacted by the operation or closure of the surface impoundments, the plan proposes a pump and treat system be established utilizing groundwater extraction wells and a reverse osmosis treatment system. The pump and treat system will be operated until background monitoring indicates groundwater analyte concentrations have returned to naturally occurring levels.

FINANCIAL ASSURANCES

48. Title 27, section 22207, subdivision (a) requires the Discharger to establish financial assurances for closure in accordance with the approved cost estimate naming the Central Valley Water Board as the beneficiary. The cost estimate must be equal to the cost of closing the surface impoundments at the point in their active life when the extent and manner of operation would make closure the most expensive. When closing units in phases, the estimate may account for closing only the maximum area or unit of the surface impoundments open at any time. The Discharger's December 2000 PCPCMP includes a cost estimate for the surface impoundments closure. The lump sum estimate is for the cost to close largest future area needing closure at any one time. The total amount of the closure cost estimate in 2000 dollars is $1,263,655. As of 2017, the balance of the closure fund was $2,472,150.

49. The Discharger's December 2000 PCPCMP does not include a cost estimate for surface impoundment post-closure maintenance. On 24 March 2017, the Discharger submitted the *Updated Closure and Post Closure Cost Estimates* which provided a cost estimate for surface impoundment post-closure maintenance. As of 2017, the balance of the post-closure maintenance fund was $132,925.

50. Title 27, section 20380, subdivision (b) requires that the Discharger obtain and maintain assurance of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases from the WMUs. The December 2000 PCPCMP does not include a cost estimate for corrective action and corrective action financial assurances have not been previously provided by the Discharger for the WMUs. Provision H.6 requires the Discharger to submit of a corrective action cost estimate and establish a corrective action fund.

CEQA AND OTHER CONSIDERATIONS

51. The action to revise WDRs for this existing facility is exempt from the provisions of the California Environmental Quality Act ("CEQA"), Public Resource Code section 21000, et seq., and the CEQA guidelines, in accordance with Title 14, section 15301.

52. This order implements:

    a. *The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition*;

    b. The prescriptive standards and performance goals of California Code of Regulations, title 27, section 20005 et seq., effective 18 July 1997, and subsequent revisions;

53. Based on the threat and complexity of the discharge, the Facility is determined to be classified 1-B as defined below:

a. Category 1 threat to water quality, defined as, “Those discharges of waste that could cause the long-term loss of a designated beneficial use of the receiving water. Examples of long-term loss of a beneficial use include the loss of drinking water supply, the closure of an area used for water contact recreation, or the posting of an area used for spawning or growth of aquatic resources, including shellfish and migratory fish.”

b. Category B complexity, defined as “Any discharger not included in Category A that has physical, chemical, or biological treatment systems (except for septic systems with subsurface disposal), or any Class 2 or Class 3 waste management units.”

54. The *Statement of Policy With Respect to Maintaining High Quality of Waters in California*, SWRCB Order WQ 68-16 (hereinafter "Anti-Degradation Policy") was adopted by the State Water Board in October 1968. Anti-Degradation Policy limits the Board’s discretion to authorize the degradation of "high-quality waters." This policy has been incorporated into the Board’s Basin Plans. "High-quality waters" are defined as those waters where water quality is more than sufficient to support beneficial uses designated in the Board’s Basin Plan. Whether or not a water is a high-quality water is established on a constituent-by-constituent basis, which means that an aquifer can be considered a high-quality water with respect to one constituent, but not for others. (SWRCB Order No. WQ 91-10.)

55. Anti-Degradation Policy applies when an activity discharges to high quality waters and will result in some degradation of such high quality waters. When it applies, the Policy requires that WDRs reflect best practicable treatment or control (BPTC) of wastes and that any degradation of high quality waters (a) will be consistent with the maximum benefit to the people of the State, and (b) will not result in an exceedance of WQOs. If the activity will not result in the degradation of high quality waters, Anti-Degradation Policy does not apply, and the Discharger need only demonstrate that it will use "best efforts" to control the discharge of waste.

56. Anti-Degradation Policy does not apply to the Facility. The discharges regulated by this Order are required to comply with the land disposal regulations in Title 27, which are intended to prevent discharges of waste to waters of the state, preventing degradation of waters of the state. The discharge is subject to WDRs, which will result in “best efforts” to control the discharge of waste.

57. Water Code section 13267, subdivision (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 proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste outside of its region that could affect the quality of the waters of the state within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the board requires. The burden, including costs of these reports, shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

58. The technical reports required by this Order and the attached MRP R5-2018-0069 are necessary to assure compliance with these WDRs. The Discharger owns and operates the

facility that discharges the waste subject to this Order and is, therefore, subject to California Water Code section 13267, subdivision (b).

59. The Board is developing Basin Plan amendments to incorporate new programs for addressing ongoing salt and nitrate accumulation in the Central Valley. These programs would change how the Board issues permits for discharges of salt and nitrate. Should the Board adopt amendments to the Basin Plan, this Order may be amended or modified to incorporate any newly-applicable requirements.

PROCEDURAL REQUIREMENTS

60. All local agencies with jurisdiction to regulate land use, liquid waste disposal, air pollution, and to protect public health have approved the use of this Facility for the discharges of waste to land stated herein.

61. The Central Valley Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for this discharge, and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

62. The Central Valley Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.

63. Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date that this Order becomes final, except that if the thirtieth day following the date that this Order becomes final 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 upon request.

IT IS HEREBY ORDERED, pursuant to California Water Code sections 13263 and 13267, that Order No. 5-00-114 is rescinded except for purposes of enforcement, and that Bell-Carter Olive Company, Inc. and the City of Corning, their agents, successors, and assigns, in order to meet the provisions of Division 7 of the California Water Code and the regulations adopted thereunder, shall comply with the following:

A. PROHIBITIONS

1. The discharge of ‘hazardous waste’ is prohibited. For the purposes of this Order, the term ‘hazardous waste’ is as defined in California Code of Regulations, Title 23, section 2510 et seq.

2. The cessation of any corrective action measure is prohibited without written Executive Officer approval. If routine maintenance or a breakdown results in cessation of corrective action for greater than 24 hours, the Discharger shall notify Board staff.

3. The Discharger shall comply with all Standard Prohibitions listed in Section C of the SPRRs.

B. DISCHARGE SPECIFICATIONS

1. The Discharger shall only discharge the wastes including olive process and brine-curing wastewater and storm water. By-pass of the Industrial Wastewater Treatment System, or overflow of untreated or partially treated waste, is prohibited.

2. The Discharger shall, in a timely manner, remove and relocate any wastes discharged at this Facility in violation of this Order. If the Discharger is unable to remove and relocate the waste, the Discharger shall submit a report to the Central Valley Water Board explaining how the discharge occurred, why the waste cannot be removed, and any updates to the waste acceptance program necessary to prevent re-occurrence. If the waste is a hazardous waste, the Discharger shall immediately notify the Department of Toxic Substances Control.

3. Provision H.6 requires submittal of an Operation and Maintenance Plan that identifies the Action Leakage Rate (ALR) for each Class II surface impoundment. If leachate generated in the LCRS of a Class II surface impoundment exceeds the ALR, the Discharger shall immediately take steps to locate and repair leak(s) in the liner system and shall immediately notify the Central Valley Water Board. If the repairs do not result in a leakage rate less than the required ALR, the Discharger shall immediately notify the Central Valley Water Board. The notification shall include a timetable for remedial action to repair the upper liner of the surface impoundment or action necessary to reduce leachate production.

4. The Discharger shall conduct leak detection testing at the frequency and according to the triggers identified in the forthcoming Operations and Maintenance Plan. Any leaks shall be repaired and a report documenting the survey and repairs shall be included in the Annual Monitoring Report for that year as required by the attached MRP.

5. Leachate may be returned to the surface impoundment of origin listed in Finding 6 of this Order in accordance with Standard Discharge Specifications D.2 through D.4 of the SPRRs.

6. The Discharger shall comply with all Standard Discharge Specifications listed in Section D of the SPRRs.

C. FACILITY SPECIFICATIONS

1. The Discharger shall comply with all Standard Facility Specifications listed in Section E of the SPRRs.

D. CONSTRUCTION SPECIFICATIONS

1. Pursuant to Water Code Section 13260, subdivision (c), the Discharger shall not construct any expansion beyond the existing footprint until the Discharger has submitted a ROWD, receives

revised WDRs, and all design reports, plans, and specifications and applicable CQA plans have been approved by the Executive Officer.

2. The Discharger shall comply with all Standard Construction Specifications listed in Section F of the SPRRs.

3. The Discharger shall comply with all Storm Water Provisions listed in Section L of the SPRRs.

E. CLOSURE AND POST-CLOSURE MAINTENANCE SPECIFICATIONS

1. The Discharger shall submit a final or partial final closure and post-closure maintenance plan at least two years prior to proposed closure of any portion of the surface impoundments in accordance with requirements in Section G of the Standard Closure and Post-Closure Specifications in the SPRRs.

2. The Discharger shall close surface impoundment units via clean closure as proposed in the December 2000 PCPCMP and as approved by this Order. The clean closure operations as proposed in the PCPCMP are listed in Finding 45.

3. The Discharger shall obtain revised WDRs prior to closure with any other clean closure design than the design or designs approved in this Order, except when modifications are necessary for problematic areas associated with the clean closure, and the modifications are approved by Central Valley Water Board staff.

4. The Discharger shall ensure that the vegetative/erosion resistant layer receives necessary seed, binder, and nutrients to establish the vegetation proposed in the final closure plan. The Discharger shall install necessary erosion and sedimentation controls to prevent erosion and sediment in runoff from the closed surface impoundments during the period the vegetation is being established.

5. The Discharger shall comply with all Standard Closure and Post-Closure Specifications listed in Section G, all Standard Construction Specifications that are applicable to closure in Section F of the SPRRs, and all Storm Water Provisions that are applicable to closure and post-closure listed in Section L of the SPRRs.

F. FINANCIAL ASSURANCE SPECIFICATIONS

1. By 1 June of each year, pursuant to Section 22207 of Title 27, the Discharger shall submit a report to the Central Valley Water Board showing that it has established an irrevocable closure and post-closure maintenance fund for the surface impoundments in at least the amounts of $2,472,150 and $132,925 respectively, adjusted for inflation annually.

2. The Discharger shall update the PCPCMP any time there is a change that will increase the amount of the closure and/or post-closure maintenance cost estimate. The updated PCPCMP shall be submitted to the Central Valley Water Board and shall meet the requirements of Title 27, section 21769(b), and include a lump sum estimate of the cost of carrying out all actions necessary to close each Unit, to prepare detailed design specifications, and to develop the final closure and post-closure maintenance plan. Reports regarding financial assurance required in F.1 above shall reflect the updated cost estimate.

3. The Discharger has not submitted a cost estimate for corrective action of all known or reasonably foreseeable releases from the surface impoundments. Provision H.6 requires submittal of a corrective action cost estimate and assurances of financial responsibility for completing corrective action for all known and reasonably foreseeable releases from the WMUs.

4. Beginning in 2020, by 1 June of each year, pursuant to Title 27, section 22222, the Discharger shall submit a report showing that it has established and is maintaining an irrevocable corrective action fund with the Central Valley Water Board named as beneficiary to ensure funds are available to address a known or reasonably foreseeable release from the Class II surface impoundments. The financial assurance mechanism shall be one listed in Title 27, section 22228 that the Discharger is eligible for.

5. The Discharger shall comply with all Standard Financial Assurance Specifications listed in Section H of the SPRRs.

G. MONITORING SPECIFICATIONS

1. The Discharger shall comply with the detection monitoring program provisions of Title 27 for groundwater, and in accordance with MRP R5-2018-0069, and the Standard Monitoring Specifications listed in Section I of the SPRRs.

2. The Discharger shall, for any surface impoundment unit in a corrective action monitoring program, comply with the corrective action monitoring program provisions of Title 27, MRP R5-2018-0069, and the Standard Monitoring Specifications listed in Section I of SPRRs.

3. The Discharger shall comply with the WQPS as specified and required by this Order, MRP R5-2018-0069, and the SPRRs.

4. The concentrations of the COCs in waters passing the point of compliance (defined pursuant to Title 27, section 20164 as a vertical surface located at the hydraulically downgradient limit of each surface impoundment or group of contiguous surface impoundments that extends through the uppermost aquifer underlying the unit) shall not exceed the concentration limits established pursuant to MRP R5-2018-0069.

5. For each monitoring event, the Discharger shall determine whether the surface impoundments are in compliance with the WQPS using procedures specified in MRP R5-2018-0069 and the Standard Monitoring Specifications in Section I of the SPRRs.

6. As specified in MRP R5-2018-0069, the Discharger shall enter all reports and monitoring data into the online GeoTracker database as required by Division 3 of Title 27 and Chapter 30, Division 3 of Title 23.

7. The Discharger shall comply with all Standard Monitoring Specifications and Response to a Release specifications listed in Sections I and J of the SPRRs.

H. PROVISIONS

1. The Discharger shall maintain a copy of this Order at the Facility, including MRP R5-2018-0069 and the SPRRs, and make it available at all times to facility operating personnel, who shall be familiar with its contents, and to regulatory agency personnel.

2. The Discharger shall comply with all applicable provisions of Title 27 that are not specifically referred to in this Order.

3. The Discharger shall comply with MRP R5-2018-0069, which is incorporated into and made part of this Order by reference.

4. If there is any conflicting or contradictory language between the WDRs, the MRP, or the SPRRs, then language in the WDRs shall supersede either the MRP or the SPRRs, and language in the MRP shall supersede the SPRRs.

5. All reports required by this Order shall be submitted pursuant to Water Code section 13267, and shall be prepared by a California-registered civil engineer or geologist.

6. The Discharger shall complete the tasks contained in these WDRs in accordance with the following time schedule:

Task	Compliance Date
A. Sample Collection and Analysis Plan Submit a Sample Collection and Analysis Plan for review and approval.	**1 April 2019**
B. Corrective Action Cost Estimate Provide a cost estimate for initiating and completing corrective action for all known and reasonably foreseeable releases from the WMUs.	**1 June 2019**
C. Corrective Action Financial Assurance Submit a report showing establishment of financial responsibility for initiating and completing corrective action for all known and reasonably foreseeable releases from the WMUs.	**1 June 2019**
D. Water Quality Protection Standard Report Submit a WQPS Report for review and approval, pursuant to Title 27, subchapter 3, article 1.	**30 June 2019**

Task	Compliance Date
E. Surface Impoundment Operations and Maintenance Plan Submit a plan that addresses operation and maintenance of the surface impoundments, including, but not limited to: the procedure and schedule for leak testing of surface impoundment liners; the procedure and schedule for replacing surface impoundment liners, including rationale for replacement; routine inspections to assess existing liner integrity, including in conjunction with sediment removal; annual testing of the LCRS to demonstrate proper operation; and the proposed Action Leakage Rate (ALR) for each surface impoundment, calculated using the 1992 United States Environmental Protection Agency method outlined in their guidance document *Action Leakage Rate for Leak Detection Systems*, or equivalent procedures.	**31 December 2019**
F. Final Closure Plan and Post-Closure Maintenance Plan Submit a final or partial final closure and post-closure maintenance plan, design plans, CQA plan, and confirmation sampling plan for review and approval (see all Closure and Post-Closure Specifications in Section E, above and Section G of the SPRRs).	**Two years prior to closure**

7. The Discharger shall comply with all General Provisions listed in Section K of the SPRRs.

8. The Central Valley Water Board has converted to a paperless office system. All project correspondence and reports required under this Order shall therefore be submitted electronically rather than in paper form, as follows:

   All technical reports and monitoring reports required under this Order shall be converted to PDF and uploaded via internet to the State Water Board's GeoTracker database at http://geotracker.waterboards.ca.gov, as specified in California Code of Regulations, title 23, section 3892, subdivision (d) and section 3893. Project-associated analytical data shall be similarly uploaded to the GeoTracker database in an appropriate format specified under this Order under a site-specific global identification number. Information on the GeoTracker database is provided at:

   http://www.swrcb.ca.gov/ust/electronic_submittal/index.shtm

   Notification of the GeoTracker upload shall be emailed to the Central Valley Water Board at: centralvalleyredding@waterboards.ca.gov. To ensure that the submittal is routed to the

appropriate staff as quickly as possible, the following information shall be included in the body of the email:

Attention:	Groundwater Unit
Report Title	
GeoTracker Upload ID	
Discharger name:	Bell-Carter Olive Company, Inc. and City of Corning
Facility name:	Industrial Wastewater Treatment Plant
County:	Tehama
CIWQS place ID:	209135

I, PATRICK PULUPA, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 5 October 2018.

ORIGINAL SIGNED BY PATRICK PULUPA

PATRICK PULUPA, Executive Officer

PD:ch

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2018-0069
FOR
BELL-CARTER OLIVE COMPANY, INC.
AND
CITY OF CORNING
INDUSTRIAL WASTEWATER TREATMENT PLANT
CLASS II SURFACE IMPOUNDMENTS
OPERATION
TEHAMA COUNTY

This monitoring and reporting program ("MRP") is issued pursuant to California Water Code section 13267 and incorporates requirements for groundwater, sludge, and leachate monitoring and reporting; facility monitoring, maintenance, and reporting; and financial assurances reporting contained in California Code of Regulations, title 27, section 20005, et seq. (hereafter Title 27), Waste Discharge Requirements ("WDRs") Order R5-2018-0069, and the Standard Provisions and Reporting Requirements ("SPRRs"). Compliance with this MRP is ordered by the WDRs and the Discharger shall not implement any changes to this MRP unless a revised MRP is issued by the Central Valley Water Board or the Executive Officer.

A. MONITORING

The Discharger shall comply with the detection monitoring program ("DMP") provisions of Title 27 for groundwater, leachate and sludge in accordance with Standard Monitoring Specifications in Section I of the SPRRs and the Monitoring Specifications in Section G of the WDRs. All monitoring shall be conducted in accordance with the forthcoming Sample Collection and Analysis Plan; Provision H.6 of the WDRs requires that this plan be submitted by 30 June 2019. The Sample Collection and Analysis Plan will include quality assurance/quality control standards ("QA/QC"). All compliance monitoring wells established for the DMP shall constitute the monitoring points for the groundwater Water Quality Protection Standard ("WQPS"). All DMP groundwater monitoring wells shall be sampled and analyzed for monitoring parameters and constituents of concern ("COCs") as indicated and listed in Tables I through IV. The Discharger may, upon approval, use alternative analytical test methods, including new USEPA approved methods, provided the methods have method detection limits ("MDLs") equal to or lower than the analytical methods specified in this MRP, and are identified in the approved Sample Collection and Analysis Plan.

Facility Monitoring and Inspection Summary		
Activity	**Inspection/Monitoring Frequency**	**Notes**
Monitoring		
Groundwater Monitoring	Quarterly	See Section A.1
Sludge Monitoring	Annually	See Section A.2
Leachate Monitoring & LCRS Testing	Weekly, monthly, quarterly, annually	See Section A.3

Facility Monitoring and Inspection Summary (Continued)		
Activity	**Inspection/Monitoring Frequency**	**Notes**
Inspections		
Annual Facility Inspection	Annual	See Section A.4.a
Storm Events	Following major storm event	See Section A.4.b
Leak Location Survey	As identified in O&M Plan[1]	See Section A.4.c
Other Facility Inspections	As identified in O&M Plan[1]	See Section A.4.d

1 Provision H.6 of the WDRs Order R5-2018-0069 requires submittal of an Operations and Maintenance (O&M) Plan by 31 December 2019.

1. Groundwater Monitoring

The Discharger shall operate and maintain a groundwater detection monitoring system that complies with the applicable provisions of Title 27, Subchapter 3 "Water Monitoring". The detection monitoring system shall be certified by a California-licensed professional civil engineer or geologist as meeting the requirements of Title 27. The current groundwater detection monitoring system does not meet the applicable requirements of Title 27.

a. The program does not satisfy Title 27's requirement of establishing a Sample Collection and Analysis Plan. [See Title 27, § 20415, subd. (e)(4).]

b. The program does not have a complete WQPS. (See Title 27, § 20390)

The current groundwater monitoring network shall consist of the following:

Well	Status	Units Being Monitored
GWMW-1	Background	none
GWMW-2	Background	none
GWMW-3	Detection	Pond No. 2, Pond No. 3, Pond No. 4
GWMW-4	Detection	Pond No. 5
GWMW-5	Background	none
GWMW-6	Detection	City of Corning WWTP
GWMW-7	Detection	Pond No. 7
GWMW-8	Detection	Pond No. 6
GWMW-9	Detection	Pond No. 4, Pond No. 5
GWMW-10	Detection	Pond No. 3
GWMW-11	Detection	Pond No. 1
GWMW-12	Detection	City of Corning WWTP
GWMW-13	Detection	City of Corning WWTP

Groundwater samples shall be collected from the background wells and detection monitoring wells as part of the approved groundwater monitoring system. The collected samples shall be analyzed for the parameters and constituents listed in Table I in accordance with the specified methods and frequencies. The Discharger shall collect, preserve, and transport groundwater samples in accordance with the forthcoming Sample Collection and Analysis Plan.

Once per quarter, the Discharger shall measure the groundwater elevation in each well, determine groundwater flow direction, and estimate groundwater flow rates in the uppermost aquifer and

in any zones of perched water and in any additional portions of the zone of saturation monitored. The results shall be reported **quarterly**, including the times of expected highest and lowest elevations of the water levels in the wells, pursuant to Title 27, section 20415, subdivision (e)(15).

2. Sludge Monitoring

A log shall be kept of sludge quantities generated and of handling and disposal activities. The frequency of the entries is discretionary; however, the log should be complete enough to serve as a basis for part of the annual report.

By **30 January** each year, the Discharger shall submit a report that includes:

1) Annual sludge production in dry tons and percent solids, and

2) A description of disposal methods, including the following information related to the disposal methods used at the Facility. If more than one disposal method is used, include the percentage of annual sludge production disposed by each method.

   a) For landfill disposal, include (a) the Regional Board's WDR order numbers that regulate the landfill(s) used, (b) the present classifications of the landfill(s) used, and (c) the names and locations of the facilities receiving sludge.

   b) For land application, include (a) the location of the site(s), (b) the Regional Board's WDR order numbers that regulate the site(s) if applicable, (c) the application rate in pounds/acre/year (specify wet or dry), and (d) subsequent uses of the land.

   c) For incineration, include (a) the names and locations of the site(s) where sludge incineration occurs, (b) the Regional Board's WDR order numbers that regulate the site(s), (c) the ash disposal method, and (d) the names and locations of facilities receiving ash (if applicable).

   d) For soil amendment application, include (a) the names and locations of the site(s) where sludge application occurs, and (b) the Regional Board's WDR order numbers that regulate the site(s).

Sludge samples shall be collected and analyzed for the parameters listed in Table II in accordance with the specified methods and frequencies.

3. Leachate Monitoring and Annual LCRS Testing

a. Leachate Monitoring

The Discharger shall operate and maintain leachate collection and removal system ("LCRS") sumps and conduct annual testing of each LCRS in accordance with Title 27 and this monitoring program.

The current LCRS leachate sump monitoring points are:

Mon Pt.	Unit Where Sump is Located
Manhole 1	Pond No. 6, Pond No. 7
Manhole 2	Pond No. 1
Manhole 3	Pond No. 2, Pond No. 3
Manhole 4	Pond No. 4, Pond No. 5

All LCRS sumps shall be inspected **weekly** for the presence of leachate, and flow shall be recorded weekly and reported **monthly**, in accordance with Table III. Weekly and monthly leachate accumulation will be compared to the Action Leakage Rate ("ALR") specified in the forthcoming Operation and Maintenance Plan for the surface impoundments. Provision H.6 of the WDRs requires submittal of the Operation and Maintenance Plan by 31 December 2019. If the leachate accumulation rate exceeds the ALR, the Discharger shall immediately take steps to locate and repair leak(s) in the liner system and shall immediately notify the Central Valley Water Board.

If leachate is detected in a previously dry sump, the Discharger shall verbally notify Central Valley Water Board staff within **seven days** and shall immediately sample and test the leachate for Field and Monitoring Parameters listed in Table III. As three of the four LCRS sumps serve two impoundments (each), the Discharger shall, through observations of the individual ports, determine the source of an increase. Leachate in the LCRS sump shall then be sampled for all parameters and constituents in accordance with the frequencies listed in Table III whenever liquid is present.

b. Annual LCRS Testing

All LCRSs shall be tested annually pursuant to Title 27, section 20340, subdivision (d) to demonstrate proper operation. The results of these tests shall be reported to the Central Valley Water Board in the **Annual Monitoring Report** and shall include comparisons with earlier tests made under comparable conditions.

4. Facility Inspections

a. Annual Facility Inspection

Annually, prior to the anticipated rainy season, but no later than **30 September**, the Discharger shall conduct an inspection of the facility. The inspection shall assess repair and maintenance needed for drainage control systems and groundwater monitoring wells; and shall assess preparedness for winter conditions (including but not limited to erosion and sedimentation control). The Discharger shall take photos of any problems areas before and after repairs. Any necessary construction, maintenance, or repairs shall be completed by **31 October**. Annual facility inspection reporting shall be submitted as required in Section B.5 of this MRP.

b. Major Storm Events

The Discharger shall inspect all precipitation, diversion, and drainage facilities and all surface impoundments for damage **within 7 days** following major storm events capable of causing damage or significant erosion. The Discharger shall take photos of any problem areas before and after repairs. Necessary repairs shall be completed **within 30 days** of the inspection. Notification and reporting requirements for major storm events shall be conducted as required in Section B.6 of this MRP.

c. Leak Location Survey

The leak location survey shall be conducted in accordance with procedures and at the frequency identified in the forthcoming Operation and Maintenance Plan. Any leaks shall be repaired and a report documenting the survey and repairs shall be included in the Annual Monitoring Report for that year.

d. Other Facility Inspection Requirements

The Discharger shall perform inspections of surface impoundments as identified in the forthcoming Operation and Maintenance Plan (required by WDR Provision H.6), such as when surface impoundments are drained for maintenance or sediment removal. The Discharger shall take photos of any problem areas before and after repairs. Reporting shall be conducted as required in Section B.2 of this MRP.

B. REPORTING

The Discharger shall submit the following reports in accordance with the required schedule:

Reporting Schedule

Section	Report	End of Reporting Period	Due Date
B.1	Quarterly Monitoring Report	31 March, 30 June 30 September, 31 December	**1 May, 1 August** **1 November, 1 February**
B.2	Annual Monitoring Report	31 December	**1 February**
B.3	Annual Sludge Monitoring Report	31 December	**1 February**
B.4	Monthly Leachate Monitoring Report	Last day of month	**4 weeks after reporting period**
B.5	Annual Facility Inspection Report	31 October	**15 November**
B.6	Major Storm Event Reporting	Continuous	**7 days from damage discovery**

Section	Report	End of Reporting Period	Due Date
B.7	Leak Location Survey	As identified in forthcoming Operations and Maintenance Plan	As identified in forthcoming Operations and Maintenance Plan
B.9	Financial Assurances Report	31 December	**1 June**

The Discharger shall enter all monitoring data and reports into the online GeoTracker database as required by Division 3 of Title 27 and Chapter 30, Division 3 of Title 23. Notification of the GeoTracker upload shall be emailed to the Central Valley Water Board at: centralvalleyredding@waterboards.ca.gov. To ensure that the submittal is routed to the appropriate staff as quickly as possible, the following information shall be included in the body of the email:

Attention:	Groundwater Unit
Report Title	
Geotracker Upload ID	
Discharger name:	Bell-Carter Olive Company, Inc. and City of Corning
Facility name:	Industrial Wastewater Treatment Plant
County:	Tehama
CIWQS place ID:	209135

Reporting Requirements

The Discharger shall submit monitoring reports **quarterly** with the data and information as required in this MRP and as required in WDRs Order R5-2018-0069 and the SPRRs (particularly Section I: "Standard Monitoring Specifications" and Section J: "Response to a Release"). The reports shall also include facility monitoring data and information identified in the forthcoming Operation and Maintenance Plan. In reporting the monitoring data required by this program, the Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. The data shall be summarized in such a manner so as to illustrate clearly the compliance with WDRs or the lack thereof. If requested by Central Valley Water Board staff, data shall also be submitted in a digital format.

Field and laboratory tests shall be reported in each monitoring report. Monthly, quarterly and annual monitoring reports shall be submitted to the Central Valley Water Board in accordance with the above schedule for the calendar period in which samples were taken or observations made.

The results of **all monitoring** required by this MRP shall be reported to the Central Valley Water Board in accordance with the reporting schedule above for the calendar period in which samples were taken or observations made.

The Discharger shall retain records of all monitoring information, including all calibration and maintenance records, all original strip chart recordings of continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained throughout the life of the facility including

the post-closure period. Such records shall be legible and shall show the following for each sample:

9. Sample identification and the monitoring point or background monitoring point from which it was taken, along with the identity of the individual who obtained the sample;

10. Date, time, and manner of sampling;

11. Date and time that analyses were started and completed, and the name of the personnel and laboratory performing each analysis;

12. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used;

13. Calculation of results; and

14. Results of analyses, and the MDL and practical quantitation limit ("PQL") for each analysis. All peaks shall be reported.

15. Required Reports

1. **Quarterly Monitoring Report:** Monitoring reports shall be submitted quarterly. The first, second, and third quarter reports are due by **1 May, 1 August, 1 November** of the reporting year. The fourth quarter report is due by **1 February** of the following year. Each quarterly monitoring report shall contain at least the following:

   a) For each groundwater monitoring point addressed by the report, a description of:

      1) The time of water level measurement;

      2) The type of pump - or other device - used for purging and the elevation of the pump intake relative to the elevation of the screened interval;

      3) The method of purging used to stabilize water in the well bore before the sample is taken including the pumping rate; the equipment and methods used to monitor field pH, temperature, and conductivity during purging; results of pH, temperature, conductivity, and turbidity testing; and the method of disposing of the purge water;

      4) The type of pump - or other device - used for sampling, if different than the pump or device used for purging; and

      5) A statement that the sampling procedure was conducted in accordance with the approved Sample Collection and Analysis Plan.

   b) A map or aerial photograph showing the locations of observation stations, monitoring points, and background monitoring points.

   c) The estimated quarterly groundwater flow rate and direction in the uppermost aquifer, in any zones of perched water, and in any additional zone of saturation monitored based upon water level elevations taken prior to the collection of the water quality data submitted in the report [Title 27, §20415, subdivision (e)(15)].

   d) Cumulative tabulated monitoring data over the previous five-years for all monitoring points and constituents for groundwater and leachate. Concentrations below the laboratory

reporting limit shall not be reported as "ND" unless the reporting limit is also given in the table. Otherwise they shall be reported "<" the reporting limit (e.g., <0.10). Units shall be as required in Tables I through IV unless specific justification is given to report in other units. Refer to the SPRRs Section I "Standard Monitoring Specifications" for requirements regarding MDLs and PQLs.

e) Laboratory statements of results of all analyses evaluating compliance with requirements.

f) An evaluation of the concentration of each monitoring parameter as compared to the current concentration limits, and the results of any required verification testing for constituents exceeding a concentration limit. Report any actions taken under Section J: Response to a Release for verified exceedances of a concentration limit for wells/constituents not already in corrective action monitoring.

g) An evaluation of the effectiveness of the leachate monitoring and control facilities. Include a summary of any instances where leachate depth on a surface impoundment LCRS exceeded 30 cm (excluding the leachate sump), information about whether the leachate accumulation rate exceeded the ALR established in the forthcoming Operation and Maintenance Plan, and information about the required notification and corrective action in Standard Facility Specification E.4 of the SPRRs.

h) A summary of inspection and repair of closed impoundment units in accordance with an approved final post-closure maintenance plan as required by Standard Closure and Post-Closure Maintenance Specifications G.9 through G.12 of the SPRRs.

i) Field documentation for the sampling event including field notes, calibration records, groundwater sampling records, water level measurements, and total well depth measurements.

2. **Annual Monitoring Report:** The Discharger shall submit an Annual Monitoring Report to the Central Valley Water Board by **1 February** covering the reporting period of the previous monitoring year. If desired, the Annual Monitoring Report may be combined with the **fourth quarterly report**, but if so, shall clearly state that it is both a quarterly and annual monitoring report in its title. Each Annual Monitoring Report shall contain the following information:

   a) All monitoring parameters shall be graphed to show historical trends at each monitoring point and background monitoring point, for all samples taken within at least the previous five calendar years. Each such graph shall plot the concentration of one or more constituents for the period of record for a given monitoring point or background monitoring point, at a scale appropriate to show trends or variations in water quality. The graphs shall plot each datum, rather than plotting mean values. Graphical analysis of monitoring data may be used to provide significant evidence of a release.

   b) An evaluation of the monitoring parameters with regards to the cation/anion balance, and a graphical presentation using a Stiff diagram, a Piper graph, or a Schoeller plot.

   c) All historical monitoring data for which there are detectable results, including data for the previous year, shall be submitted in tabular form. If requested by Central Valley Water Board staff, data shall also be submitted in a digital format. The Central Valley Water Board regards the submittal of data in hard copy and in digital format as "...the form necessary for..." statistical analysis [Title 27, section 20420(h)], that facilitates periodic review by the Central Valley Water Board.

d) Hydrographs of each well showing the elevation of groundwater with respect to the elevations of the top and bottom of the screened interval and the elevation of the pump intake. A hydrograph for each well showing the quarterly groundwater level measurements shall be submitted annually and shall depict at least the reporting year and the previous four-years.

e) A comprehensive discussion of the compliance record, and the result of any corrective actions taken or planned which may be needed to bring the Discharger into full compliance with the WDRs.

f) A written summary of the monitoring results, indicating any changes made or observed since the previous Annual Monitoring Report.

g) The results of the annual testing of LCRS required under Standard Facility Specification E.8 of the SPRRs.

h) Updated concentration limits for each monitoring parameter at each monitoring well based on the new data set.

3. **Annual Sludge Monitoring Report:** By **1 February** of each year, the Discharger shall submit a report documenting the dry tons of sludge produced, the percent solids and a description of the sludge disposal methods including the percentage of annual sludge production disposed by each method if more than one method is used. Refer to Section A.a of this MRP.

4. **Monthly Leachate Monitoring Report**: No more than **4 weeks** after each reporting period, the Discharger shall submit a report describing the results of the weekly leachate flow measurements and the monthly leachate sampling results. Refer to Section A.a of this MRP.

5. **Annual Facility Inspection Reporting:** By **15 November** of each year, the Discharger shall submit a report describing the results of the facility and surface impoundments inspection and the repair measures implemented, preparations for winter, and include photographs of any problem areas and the repairs. Refer to Section A.a of this MRP.

6. **Major Storm Event Reporting:** The Discharger **immediately** shall notify Central Valley Water Board staff of any damage or significant erosion caused by a major storm event and report subsequent repairs within **14 days** of completion of the repairs, including photographs of the problem and the repairs. Refer to Section A.b of this MRP.

7. **Leak Location Survey Reporting:** The Discharger shall submit a report documenting leak location surveys and any repairs for the upper liner of each surface impoundment. Leak detection testing frequency and triggers will be identified in the forthcoming Operations and Maintenance Plan. The report can be submitted as a component of the **Annual Monitoring Report**.

8. **Financial Assurances Report:** By **1 June** of each year, the Discharger shall submit a copy of the annual financial assurances report due to CalRecycle that updates the financial assurances for closure, post-closure maintenance, and corrective action. Refer to Financial Assurances Specifications F.1 through F.3 of the WDRs.

C. WATER QUALITY PROTECTION STANDARD AND COMPLIANCE PERIOD

1. Water Quality Protection Standard Report

For each waste management unit ("WMU"), the WQPS shall consist of all COCs, the concentration limit for each COC, the verification retesting procedure to confirm measurably significant evidence of a release, the point of compliance ("POC"), and all water quality monitoring points for each monitored medium.

The WQPS for naturally occurring waste constituents consists of the COCs, the concentration limits, and the POC and all monitoring points. Any proposed changes to the WQPS other than annual update of the concentration limits shall be submitted in a report for review and approval.

The WQPS Report shall:

a. Identify **all distinct bodies of surface and ground water** that could be affected in the event of a release from a WMU or portion of a unit. This list shall include at least the uppermost aquifer and any permanent or ephemeral zones of perched groundwater underlying the facility.

b. Include a map showing the monitoring points and background monitoring points for the groundwater monitoring program. The map shall include the POC in accordance with Title 27, section 20405.

c. Evaluate the perennial direction(s), estimated average groundwater gradient(s) and estimated average groundwater velocity(ties) of groundwater movement within the uppermost groundwater zone(s).

d. Include a proposed statistical method for calculating concentration limits for monitoring parameters and COC that are detected in 10% or greater of the background data (naturally-occurring constituents) using a statistical procedure from Title 27, section 20415, subdivision (e)(8)(A-D) or Title 27 section 20415, subdivision, (e)(8)(E).

e. Include a retesting procedure to confirm or deny measurably significant evidence of a release pursuant to Title 27, section 20415, subdivision (e)(8)(E) and Title 27, section 20420, subdivision (j)(1-3).

The WQPS Report shall be certified by a California-registered civil engineer or geologist as meeting the requirements of Title 27. 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 site, the Discharger may request modification of the WQPS Report.

The Discharger has not submitted a WQPS Report. Provision H.6 of WDRs Order No. R5-2018-0069 requires submittal of a WQPS Report. As appropriate, the concentration limits shall be updated annually for each monitoring well using new and historical monitoring data.

2. Monitoring Parameters

Monitoring parameters are a select group of constituents that are monitored during each monitoring event that are the waste constituents, reaction products, hazardous constituents, and physical parameters that provide a reliable indication of a release from a WMU. The monitoring parameters for all WMUs are those listed in Tables I through IV for the specified monitored medium.

3. Concentration Limits

For a naturally occurring COCs, the concentration limit for each COC shall be determined as follows:

a. By calculation in accordance with a statistical method pursuant to Title 27, section 20415, subdivision (e)(8); or

b. By an alternate statistical method meeting the requirements of Title 27, section 20415, subdivision (e)(8)(E).

The methods for calculating concentration limits will be provided in the forthcoming WQPS Report. Provision H.6 of WDRs Order No. R5-2018-0069 requires submittal of a WQPS Report. Upon approval, the concentration limits will be calculated using the data analysis methods described in the WQPS Report.

4. Retesting Procedures for Confirming Evidence of a Release

If monitoring results indicate measurably significant evidence of a release, as described in Standard Monitoring Specification I.43 of the SPRRs, then:

a. For analytes that are detected in less than 10% of the background samples (such as non-naturally occurring constituents), the Discharger shall use the non-statistical retesting procedure required in Standard Monitoring Specification I.44 of the SPRRs.

b. For analytes that are detected in 10% or greater of the background samples (naturally occurring constituents), the Discharger shall use one of the statistical retesting procedure as required in Standard Monitoring Specification I.45 of the SPRRs.

5. Point of Compliance

The POC for the WQPS at each WMU is a vertical surface located at the hydraulically downgradient limit of the WMU that extends through the uppermost aquifer underlying the WMU. The following are monitoring locations at the POC:

Cell or Module	POC Monitoring Wells
Pond No. 1	GWMW-11
Pond No. 2	GWMW-3
Pond No. 3	GWMW-3, GWMW-10
Pond No. 4	GWMW-3, GWMW-9
Pond No. 5	GWMW-4, GWMW-9
Pond No. 6	GWMW-8
Pond No. 7	GWMW-7

6. Compliance Period

The compliance period for each WMU shall be the number of years equal to the active life of the unit plus the closure period. The compliance period is the minimum period during which the Discharger shall conduct a water quality monitoring program subsequent to a release from the WMU. The compliance period shall begin anew each time the Discharger initiates an evaluation monitoring program [Title 27, section 20410].

7. Monitoring Points

A monitoring point is a well, device, or location specified in the WDRs, which monitoring is conducted and at which the WQPS applies. The monitoring points for each monitored medium are listed in Section A of this MRP.

D. TRANSMITTAL LETTER FOR ALL REPORTS

A transmittal letter explaining the essential points shall accompany each report. At a minimum, the transmittal letter shall identify any violations found since the last report was submitted, and if the violations were corrected. If no violations have occurred since the last submittal, this shall be stated in the transmittal letter. The transmittal letter shall also state that a discussion of any violations found since the last report was submitted, and a description of the actions taken or planned for correcting those violations, including any references to previously submitted time schedules, is contained in the accompanying report. The transmittal letter shall contain a statement by the discharger, or the Discharger's authorized agent, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate, and complete.

I, PATRICK PULUPA, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 5 October 2018.

ORIGINAL SIGNED BY PATRICK PULUPA

Ordered by:_____

PATRICK PULUPA, Executive Officer

PD

TABLE I

GROUNDWATER DETECTION MONITORING PROGRAM

Parameter	Geotracker Code	Units	Sampling Frequency	Reporting Frequency
Field Parameters				
Groundwater Elevation	GWELEV	Ft. & 100ths, M.S.L.[1]	Quarterly	Quarterly
Temperature	TEMP	^{o}F	Quarterly	Quarterly
Electrical Conductivity	SC	umhos/cm[2]	Quarterly	Quarterly
pH	PH	pH units	Quarterly	Quarterly
Turbidity	TURB	Turbidity units	Quarterly	Quarterly
Monitoring Parameters and Constituents of Concern				
Total Dissolved Solids	TDS	mg/L[3]	Quarterly	Quarterly
Chloride	CL	mg/L	Quarterly	Quarterly
Biochemical Oxygen Demand	BOD	mg/L	Quarterly	Quarterly
Chemical Oxygen Demand	COD	mg/L	Quarterly	Quarterly
Nitrate - Nitrogen	NO3N	mg/L	Quarterly	Quarterly
Sodium	NA	mg/L	Quarterly	Quarterly

1. Feet mean sea level
2. Micromhos per centimeter
3. Milligrams per liter

TABLE II

SLUDGE MONITORING PROGRAM

Parameter	Units	Sampling Frequency	Reporting Frequency
Monitoring Parameters			
Sludge Production	Tons	Annually	Annually
Sludge Production	Percent Solids	Annually	Annually
Disposal Method	NA	Annually	Annually

TABLE III

LEACHATE MONITORING [1], LCRS TESTING [2] AND LINER TESTING

Parameter	Geotracker Code	Units	Sampling/ Testing Frequency	Reporting Frequency
Field Parameters				
Flow Rate	FLOW	gallons/min/acre	Weekly	Monthly
Electrical Conductivity	SC	umhos/cm[3]	Monthly	Monthly
pH	PH	pH units	Monthly	Monthly
Monitoring Parameters and Constituents of Concern				
Total Dissolved Solids (TDS)	TDS	mg/L[4]	Monthly	Monthly
Chloride	CL	mg/L	Monthly	Monthly
Nitrate - Nitrogen	NO3N	mg/L	Monthly	Monthly
Biochemical Oxygen Demand	BOD	mg/L	Quarterly	Quarterly
Chemical Oxygen Demand	COD	mg/L	Monthly	Monthly
Sodium	NA	mg/L	Monthly	Monthly
LCRS Testing [2]		---	Annually	Annually
Leak Location Survey, Upper Liner		As identified in forthcoming O&M Report		

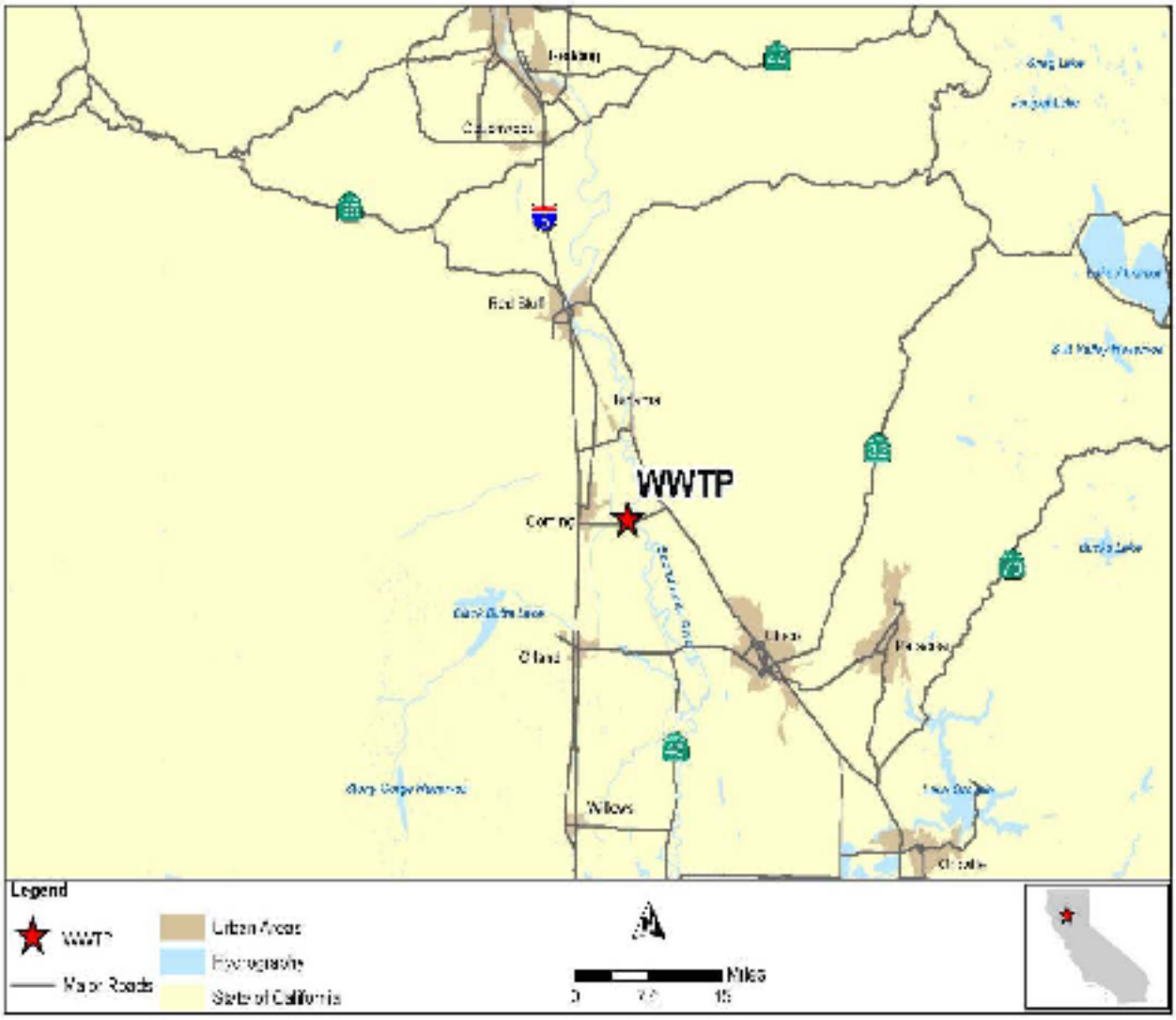
1. If leachate is detected in a previously dry sump, the Discharger shall verbally notify Central Valley Water Board staff within **seven days** and shall immediately sample and test the leachate for Field and Monitoring Parameters listed in Table III. Leachate in the LCRS sump shall then be sampled for all parameters and constituents in accordance with the frequencies listed in Table III whenever liquid is present.
2. The Discharger shall test each LCRS annually pursuant to Title 27, section 20340, subdivision (d) to demonstrate proper operation. The results of the tests shall be compared with earlier tests made under comparable conditions.
3. Micromhos per centimeter
4. Milligrams per liter

TABLE IV

MONITORING PARAMETERS FOR DETECTION MONITORING

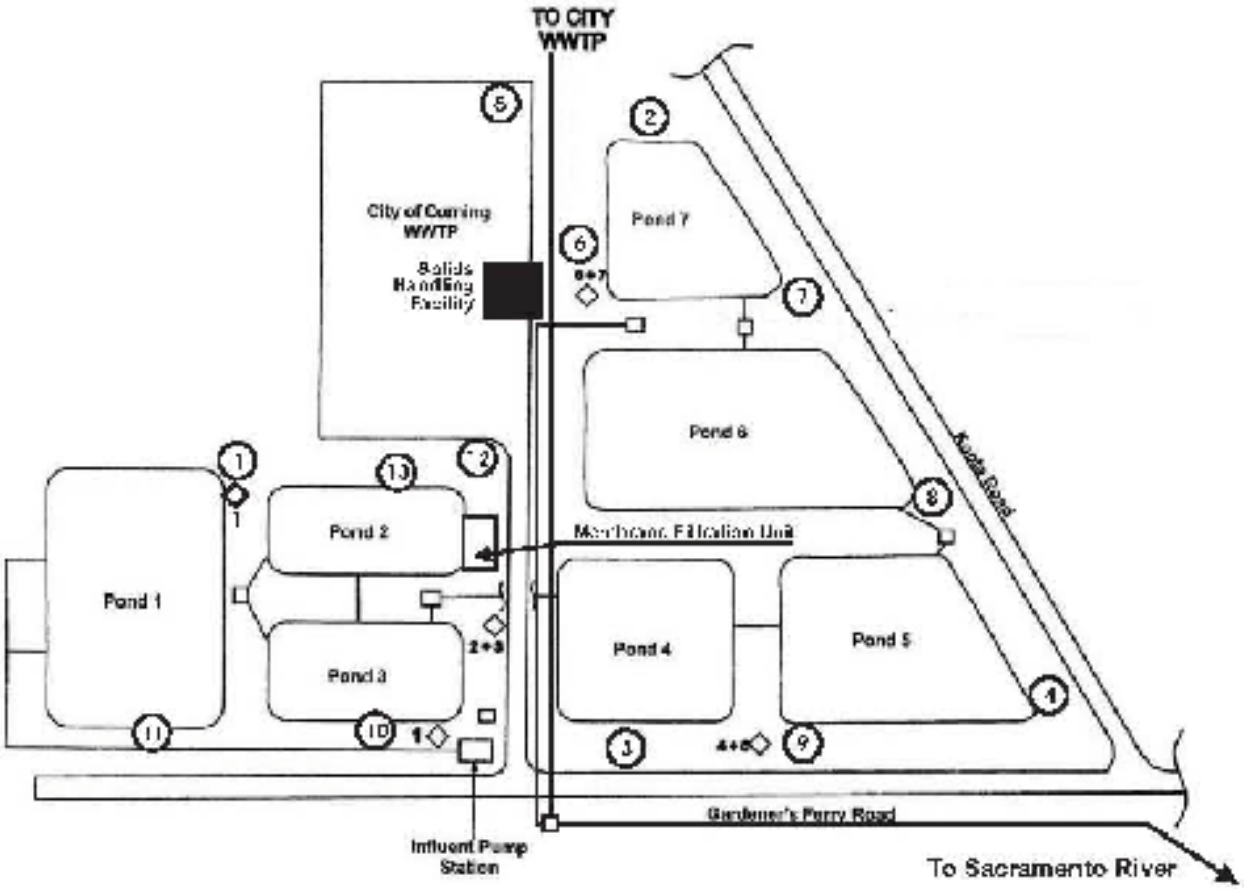
COC Description	Geotracker Code
pH	PH
Total Dissolved Solids	TDS
Electrical Conductivity	SC
Chloride	CL
Biochemical Oxygen Demand	BOD
Chemical Oxygen Demand	COD
Nitrate nitrogen	NO3N
Sodium	NA

ATTACHMENT A



BELL-CARTER OLIVE COMPANY, INC. AND CITY OF CORNING
INDUSTRIAL WASTEWATER TREATMENT PLANT

ATTACHMENT B



N

① MONITORING WELLS

◇ LEAKAGE RECOVERY SUMPS
2+3

□ DISTRIBUTION BOXES AND PUMP STATIONS

BELL-CARTER OLIVE OIL, INC.
INDUSTRIAL WASTEWATER TREATMENT PLANT
SITE PLAN

INFORMATION SHEET

ORDER NO. R5-2018-0069
BELL-CARTER OLIVE COMPANY, INC. AND CITY OF CORNING
INDUSTRIAL WASTEWATER TREATMENT PLANT CLASS II SURFACE IMPOUNDMENTS
TEHAMA COUNTY

The Bell-Carter Olive Company, Inc. and City of Corning Industrial Wastewater Treatment Plant (Facility) is a series of seven Class II surface impoundments located approximately six miles east of the City of Corning in Tehama County. Bell-Carter Olive Company, Inc. (Bell-Carter) operates and the City of Corning owns the Facility. The Facility was originally operated as part of the City of Corning Wastewater Treatment Plant (WWTP), using oxidation ponds until secondary treatment improvements were made at the WWTP. The City of Corning abandoned the oxidation ponds in 1987, and through a land lease agreement, Bell-Carter took over and modified the oxidation ponds for the treatment of olive processing wastewater. The modifications were made in order to meet Chapter 15 requirements for Class II Surface Impoundments.

The Facility's Ponds 2 through 7 are lined with a high-density polyethylene (HDPE) liner over a leachate collection and removal system (LCRS), over a secondary liner consisting of native soils placed and compacted to achieve a permeability of $1x10^{-6}$ centimeters per second. Pond 1 has a HDPE primary liner, underlaid by a geogrid, over a LCRS system, and a low permeability soil layer.

Influent flow is introduced to Pond 1 directly from the influent pumping station, and is allowed to pass through the system from Pond 1 to Pond 5, achieving the removal of organic matter, suspended solids and other wastewater pollutants, and reduction of biochemical oxygen demand (BOD). Ponds 6 and 7 function as storage ponds, and allow for further polishing of the effluent. After passing through Pond 1, influent from Ponds 2 and 3 may pass through a Zenon filtration unit. This filtered fluid may then be discharged directly to the Sacramento River outfall. Unfiltered fluid which bypasses the Zenon filtration unit is discharged to Pond 4. Ponds 4 and 5 allow for sedimentation of solids, and thus, further reduction in waste. Unfiltered fluid is ultimately discharged from Pond 7 to the Sacramento River. Effluent discharge is permitted under WDR Order No. 2015-0030, National Pollutant Discharge Elimination System Permit No. CA0083721. Prior to release into the Sacramento River, treated effluent comingles with effluent from the WWTP through a shared outfall diffuser.

The Facility covers approximately 46 acres, with 27 acres dedicated to the surface impoundments. The Facility generally slopes to the east toward the Sacramento River. Land uses within one mile of the Facility are predominately cropland and grazing lands. Several single-family residences are located directly to the south of the Facility. There are 127 municipal, domestic, industrial, or agricultural groundwater supply wells within one mile of the Facility. The Facility receives an average of 23 inches of precipitation per year and the mean pan evaporation is approximately 57 inches per year. Surface soils in the area belong to the Red Bluff and Riverbank Formations, which are composed of unlithified gravel, sand, silt, and clay. Underlying soils at a depth greater than 100 feet are Pliocene-age volcanics and fluvial deposits of the Tehama Formation.

Groundwater is typically encountered 25 to 50 feet below ground surface and generally flows southeastward towards the Sacramento River. The Facility has been exempted from vadose zone monitoring due to the shallow depth of groundwater beneath the facility. Thirteen monitoring wells are used for the monitoring and reporting as specified in Monitoring and Reporting Program No. R5-2018-0069. Total depths of the wells range from 36 to 60 feet below ground surface. Based on the available data, the Facility has not impacted groundwater. Leachate monitoring sumps are inspected weekly for fluid accumulation; leachate samples are collected on a monthly basis.