

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER R7-2012-0026

WASTE DISCHARGE REQUIREMENTS
FOR
RIVERSIDE COUNTY ECONOMIC DEVELOPMENT AGENCY, OWNER
CSA 122 RIPLEY, OPERATOR
BLYTHE AIRPORT WATER SYSTEM
CLASS II SURFACE IMPOUNDMENTS

Blythe – Riverside County

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board), finds that:

1. The Riverside County Economic Development Agency (hereinafter referred to as the Discharger), located at 3403 10th Street, Fourth Floor, Riverside, CA 92501, submitted a Report of Waste Discharge (ROWD) on July 23, 2009 for a proposed domestic water supply treatment, storage and distribution system.
2. The proposed water treatment system (Facility) is located near the Blythe Airport at 16720 West Hobsonway, Blythe, CA 92225. The location of the Facility is shown in Attachment 1, incorporated herein and made a part of this Order.
3. Water will be extracted from a recently constructed Supply Well No. 8 located on the southeast side of the Blythe Airport. Water will be pumped from Supply Well No. 8 to the treatment facility, which will treat up to 475 gallons-per minute (gpm) (0.68 million gallons per day (MGD)). The treated water will be blended with untreated water to provide a total of 900 gpm (1.30 MGD) of domestic supply water.
4. The Facility is designed to reduce the concentration of fluoride and arsenic in the domestic supply water in order to meet the maximum concentration levels (MCLs) set by the U.S. Environmental Protection Agency. Treatment of the supply water will be accomplished using an activated alumina treatment process. Operation of the Facility will result in the discharge of treatment vessel backwash water, which will be contained in two proposed, double-lined Class II surface impoundments for disposal by evaporation.
5. The treatment process requires treatment vessels to be rejuvenated periodically by backwashing. The Discharger reports that backwashing will occur about every 19 days and will result in the discharge of approximately 220,000 gallons per backwash. The Discharger expects to discharge approximately 4,180,000 gallons (12.8 acre-feet) of water annually.
6. This Order No. R7-2012-0026 is being adopted to regulate the discharge of the rejuvenation wastewater to the two proposed Class II surface impoundments, which will be designed to comply with the prescriptive requirements of Title 27 of the California Code of Regulations (Title 27).

7. Water quality data collected from Supply Well No. 8 and provided by the Discharger is included in the following table:

Constituent	Conc.	Unit
Arsenic	13	µg/L ¹
Fluoride	2.3	mg/L ²
Total Dissolved Solids (TDS)	770	mg/L
Boron	1200	µg/L
pH	8.1	pH units

1 micrograms per liter

2 milligrams per liter

8. Title 27 construction standards require that all Class II surface impoundments have a single or double liner system that achieves a maximum permeability of 1×10^{-6} cm/sec and that double-lined systems must have a blanket-type leachate collection and removal system (LCRS).
9. The facility proposes to use two double-lined Class II surface impoundments (ponds) to dispose of the treatment vessel backwash water through evaporation. Each pond will have an LCRS sump that will accommodate twice the average daily expected volume of leachate from each pond.
10. The double-lined system provides two layers of synthetic membrane to prevent leakage from the impoundments and a geo-net drainage layer to provide a positive means of leak detection. The system consists of the following components:
- Primary Liner – 80 mil high density polyethylene (HDPE) synthetic liner
 - Drainage Layer – 200 mil geo-net drainage layer
 - Secondary Liner – 80 mil HDPE synthetic liner

Stormwater

11. Federal regulations for storm water discharges were promulgated by the United States Environmental Protection Agency (USEPA) on November 16, 1990 (40 CFR Parts 122, 123, and 124). The regulations require specific categories of facilities which discharges storm water associated with industrial activity to obtain National Pollutant Discharge Elimination System (NPDES) permits and to implement Best Conventional Pollutant Technology (BCPT) to reduce or eliminate industrial storm water pollution.
12. The State Water Resources Control Board (SWRCB) adopted Order 97-03-DWQ (General Permit CAS000001) specifying Waste Discharge Requirements (WDRs) for discharges of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent (NOI) by industries to be covered under the Permit (General Industrial Permit).
13. The Facility is not subject to the federal requirements for regulation of storm water discharges associated with industrial activities since it is not one of the industrial

activities listed in 40 CFR 122.26(b)(14). Therefore, the Discharger is not required to obtain coverage under Order 97-03-DWQ (General Permit CAS000001) for the Facility.

14. The storm water federal regulations also require discharges of storm water to surface waters associated with construction activity, including clearing, grading, and excavation activities (except operations that result in disturbance of less than five (5) acres of total land area and which are not part of a larger common plan of development or sale) to obtain a National Pollutant Discharge Elimination System (NPDES) permit and to implement Best Conventional Pollutant Control Technology and Best Available Technology Economically Achievable to reduce or eliminate storm water pollution. (40 CFR 122.26(b)(14)(x).) On December 8, 1999, federal regulations promulgated by USEPA (40 CFR Parts 9, 122, 123, and 124) expanded the NPDES storm water program to include, in pertinent part, storm water discharges from construction sites that disturb a land area equal to or greater than one acre and less than five acres, or is part of a larger common plan of development or sale (small construction activity). (40 CFR 122.26(b)(15).)
15. To comply with these construction storm water federal requirements, the State Water Resources Control Board (State Water Board) adopted in 1999 Water Quality Order No. 99-08-DWQ (NPDES) General Permit No. CAS000002, "Waste Discharge Requirements (WDRs) for Discharges of Storm Water Runoff Associated with Construction Activity" (Construction General Permit, or CGP). The CGP specifies WDRs for discharges of storm water associated with construction activity that results in a land disturbance of one acre or more or is part of a larger common plan of development or sale. The CGP specifies certain construction activities that are exempted from coverage. Because these exemptions do not apply to the Discharger's proposed construction activity and because this activity will result in a land disturbance of more than 1 acre, the Discharger is subject to the CGP requirements.
16. On September 2, 2009, the State Water Board adopted a new CGP to replace Order No. 99-08-DWQ. The new CGP, Order No. 2009-0009-DWQ (NPDES No. CAS000002), became effective on July 1, 2010. The website link to this new CGP is as follows: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2009/wqo/wqo2009_0009_dwq.pdf.
17. Pursuant to California Water Code (CWC) Section 13263(g), the discharge of waste is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

Groundwater

18. The Discharger installed three groundwater monitoring wells at the site in October 2009 to evaluate groundwater conditions beneath the site. All three wells were drilled to a depth of 150 feet below ground surface (bgs) with groundwater encountered between 83 and 100 feet bgs. Data from the onsite wells indicate that the groundwater gradient is to the southwest. The location of the wells and the groundwater gradient are shown in Attachment 2, incorporated herein and made a part of this Order.
19. Monitoring and Reporting Program No. R7-2012-0026, which is attached to this Board Order and incorporated herein by this reference, is necessary to determine compliance with WDRs and Facility impacts, if any, to receiving water.

20. The wastewater is from an industrial treatment process and contains no organic chemicals, viruses, bacterial agents, pharmaceutical chemicals, or other constituents associated with municipal wastewater. However, fluoride removed during the treatment process is present in the wastewater.

The Basin Plan

21. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), adopted on November 17, 1993, designates the beneficial uses of ground and surface waters in this Region. The Facility is located in the Colorado Hydrologic Unit.
22. The Basin Plan prescribes the following designated beneficial uses of ground water in the Colorado Hydrologic Unit:
 - a. Municipal Supply (MUN)
 - b. Industrial Supply (IND)
 - c. Agricultural Supply (AGR)

California Environmental Quality Act (CEQA)

23. In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.), the Riverside County Economic Development Agency, acting as lead agency, prepared an Initial Study (IS #2005-MVW) and adopted a Mitigated Negative Declaration (MND) for the District's "Mesa Verde – Blythe Airport Water System Improvements" Project on May 17, 2005. The MND was filed with the Riverside County Clerk on May 18, 2005. The Regional Water Board has considered the Negative Declaration and concluded that compliance with these WDRs will prevent and mitigate any water quality impacts.
24. The Regional Water Board has notified the Discharger and all known interested agencies and persons of its intent to issue Waste Discharge Requirements for said discharge, and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
25. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, the Discharger shall comply with the following:

A. Effluent Limitations

1. The 30-day average of discharged wastewater shall not exceed 12,000 gpd.

B. Specifications

1. No changes in type or amount of treatment chemicals added to the process water as described in the findings of this Board Order shall be made without the written approval of the Regional Water Board's Executive Officer.
2. The treatment or disposal of wastes at this facility shall not cause pollution or nuisance as defined in Sections 13050 of Division 7 of the California Water Code.
3. A minimum depth of freeboard of two (2.0) feet shall be maintained at all times in the Class II Surface Impoundments.
4. Each pond shall be double-lined. A leak detection and removal system shall be installed between the liners. The upper liner shall be at least 80 mil high-density polyethylene (HDPE) or equivalent. The lower liner shall be 80 mil HDPE or equivalent.
5. There shall be no surface flow of wastewater away from the discharge facility.
6. Wastes, including windblown spray, shall be strictly confined to the Class II surface impoundments.
7. The Class II surface impoundments shall be protected from any washout or erosion and from any inundation which could occur as a result of floods having a predicted frequency of once in 100 years.
8. Solids and settled material shall be disposed of in a manner that will not result in pollution or nuisance as defined by the California Water Code.

C. Prohibitions

1. The direct discharge of any wastewater to any surface water or surface drainage courses is prohibited.
2. Bypass or overflow of untreated or partially treated waste is prohibited.
3. The discharge of waste to land not owned or controlled by the discharger is prohibited.
4. The discharge of wastewater to a location other than the two Class II surface impoundments, described in Findings 9 and 10 above, is prohibited.
5. The disposal of wastes in excess of the design treatment capacity of the system is prohibited.
6. The discharge or deposit of hazardous waste (as defined in Title 27) and other wastes that pose a potential threat to water quality at this facility is prohibited.
7. The discharge of designated wastes (as defined in Title 27) to other than a waste management unit authorized to receive such waste is prohibited.
8. The discharge of any waste constituents to the unsaturated zone or to groundwater is prohibited.
9. The discharge of solid or liquid waste or leachate to surface waters, surface water drainage courses, or groundwater is prohibited.

10. The discharge of wastes that have the potential to reduce or impair the integrity of containment structures is prohibited.

D. Provisions

1. The Discharger shall comply with Monitoring and Reporting Program No. R7-2012-0026 and future revisions thereto, as specified by the Regional Water Board's Executive Officer.
2. Prior to any change in ownership or management of this operation, the Discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Water Board.
3. Prior to any modifications in this facility, which would result in material change in the quality or quantity of discharge, or any material change in the location of the discharge, the Discharger shall report all pertinent information in writing to the Regional Water Board and obtain revised requirements before any modifications are implemented.
4. The Discharger shall ensure that all site-operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.
5. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
6. The Regional Water Board will review this Board Order periodically and may revise requirements when necessary.
7. The Discharger shall allow the Regional Water Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the premises regulated by this Board Order; or the place where records must be kept under this Board Order;
 - b. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the California Water Code, any substances or parameters at this location.
 - c. Inspect at reasonable times: facilities, equipment (including monitoring and control equipment), practices, or operations, regulated or required by this Board Order; and
 - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order, or as otherwise authorized by the California Water Code, any substances or parameters at this location
8. After a significant earthquake event, the Discharger shall:
 - a. Immediately notify the Regional Water Board by phone; and
 - b. Within seven (7) days submit to the Regional Water Board a detailed post earthquake report describing physical damages to the containment features and groundwater monitoring facilities and a corrective action plan for repairs.
9. The Discharger shall immediately notify the Regional Water Board of any flooding, slope failure or other change in site conditions that could impair the integrity of the waste containment Facility or of precipitation and drainage control structures. The Discharger

shall submit to the Regional Water Board within 14 days a detailed report describing any physical damage to the cover, surface water diversion systems or groundwater monitoring systems.

10. The Discharger shall comply with all of the conditions of this Board Order. Any noncompliance with this Board Order constitutes a violation of the Porter-Cologne Water Quality Control Act and is grounds for enforcement action.
11. This Board Order does 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.
12. Unless otherwise approved by the Regional Water Board's Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", published by the United States Environmental Protection Agency.
13. The results of any analysis of samples taken more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Regional Water Board.
14. The Discharger shall provide an inventory of all hazardous materials that will be handled at the facility within 60 days of adoption of this Order.
15. The Discharger is the responsible party for these Waste Discharge Requirements and the Monitoring and Reporting Program for the facility. The Discharger shall comply with all conditions of these Waste Discharge Requirements. Violations may result in enforcement actions, including Regional Water Board Orders or court orders, requiring corrective action or imposing civil monetary liability, or may result in modification or revocation of these Waste Discharge Requirements by the Regional Water Board.
16. The Discharger shall retain records of all monitoring information including all calibration and maintenance records, copies of all reports required by this Board Order, and records of all data used to complete the application for this Board Order. Records shall be maintained for a minimum of five (5) years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Water Board's Executive Officer.
17. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling and measurements.
 - b. The individual(s) who performed the sampling or measurements.
 - c. The date(s) analyses were performed.
 - d. The individual(s) who performed the analysis.
 - e. The analytical techniques or methods used.
 - f. The result of such analysis.

18. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), that are installed or used by the Discharger to achieve compliance with conditions of this Board Order.
19. The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with the specifications prepared by the Regional Water Board's Executive Officer. Such specifications are subject to periodic revisions as may be warranted.
20. The Discharger shall report any noncompliance that may endanger human health or the environment. The Discharger shall immediately report orally to the Regional Water Board Executive Officer and the Office of Emergency Services information of the noncompliance as soon as: (1) the Discharger has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measures. During non-business hours, the Discharger shall leave a message on the Regional Water Board office voice recorder. A written report shall be provided within five (5) business days of the time the Discharger is aware of the incident. The written report shall contain a description of the noncompliance and the cause, the period of noncompliance, the anticipated time to achieve full compliance, and steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. The Discharger shall report all intentional or unintentional spills occurring within the facility or collection system to the Regional Water Board office in accordance with the above time limits.

I, Robert Perdue, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on May 17, 2012.

Ordered by: _____ *Original signed by*
Robert Perdue
Executive Officer