

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION
ORDER R7-2019-0009**

**WASTE DISCHARGE REQUIREMENTS
FOR
MITSUBISHI CEMENT CORPORATION, OWNER/OPERATOR
CUSHENBURY PLANT INDUSTRIAL WASTEWATER DISPOSAL FACILITY
Lucerne Valley – San Bernardino County**

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

1. Mitsubishi Cement Corporation (Discharger) is the owner and operator of a cement manufacturing plant that uses two evaporation/percolation ponds for disposal of wastewater (Facility). The Facility is assigned California Integrated Water Quality System (CIWQS) No. 7A362022011 and GeoTracker Global Identification No. WDR100033340.
2. The Facility is located on approximately 790 acres at 5808 State Highway 18, Lucerne Valley, CA 92356, and is comprised of Assessor's Parcel Numbers (APN) 447-111-02 and 447-111-04. The latitude and longitude coordinates of the Facility are 34.354 degrees north and 116.852 degrees west. (Section 10, Township 3 North, Range 1 East, San Bernardino Base and Meridian.) The Facility location is shown in **Attachment A** - Vicinity Map, which is incorporated herein and made part of this Order.
3. The percolation ponds are located in the southeast quarter of Section 10, Township 3 North, Range 1 East, San Bernardino Base and Meridian, and are approximately 400 feet long, 300 feet wide, and six feet deep in size. The location of the percolation ponds is depicted in **Attachment B** – Site Map, which is incorporated herein and made part of this Order. The current location of groundwater monitoring wells for the percolation ponds is shown in **Attachment C** – Monitoring Wells Location Map, which is also incorporated herein by reference and made part of this Order.
4. The discharge of industrial wastewater generated by the Facility to the percolation ponds is currently regulated by Waste Discharge Requirements (WDRs) Order 01-006, adopted on March 14, 2001. The Facility also has an onsite, Class III landfill that is separately regulated under WDRs Order 00-009.
5. On December 14, 2017, the Discharger submitted an updated Report of Waste Discharge (ROWD) for the discharge of industrial wastewater from the Facility.
6. This Order updates the WDRs to comply with current laws and regulations as set forth in the Water Code and the California Code of Regulations. Accordingly, this Order supersedes Order 01-006 upon the effective date of this Order, except for enforcement purposes.

Facility Operations and Wastewater Treatment

7. Henry J. Kaiser originally developed the Cushenbury limestone quarry to supply his steel making operations in Fontana, California during World War II. He built the cement manufacturing plant in 1957. The Facility was modernized in 1982, and the Discharger purchased the plant in 1988.

8. The Facility uses limestone mined from rock units located within the vicinity of the plant as raw materials. Heavy-duty trucks haul the limestone from the quarry to the primary crusher. The crushed limestone is then sent to a hemispherical preblend dome, where it is blended and sent into the raw mill.
9. The raw feed material is calcined in a four-stage preheater/precalciner tower and then sintered in a 250-foot, rotating kiln, which cooks the rock to 2700 degrees Fahrenheit. The primary fuel used to heat that process is low-sulfur coal, and the Discharger also utilizes waste tires as an alternate fuel and for biosolids injection.
10. The cement clinker from the kiln is cooled and ground into a very fine powered cement in finish mills. The cement is stored in 22 cement storage silos, which have a combined capacity of 72,000 tons of finished product, prior to shipment to market.
11. The plant manufactures cement using a "dry" process. Water usage at the Facility is limited to the machine cooling system, finish mills, dust suppression, cleaning activities at the maintenance shops, and domestic consumption.
12. The Facility discharges an average of 300 gallons-per-day (gpd) of industrial wastewater that consists of overflow water from the plant cooling system. No additives are used in the plant cooling system. The wastewater is routed to unlined surface impoundments for final disposal by evaporation and infiltration.
13. The average Total Dissolved Solids (TDS) concentration of the wastewater discharged into the evaporation/percolation ponds for the last five years is 600 milligrams per liter (mg/L).
14. For the last year, the ponds have been dry, and no wastewater has been available for sampling. Very minimal sludge is generated, and it is incorporated into the soil about once a year.
15. Non-hazardous and inert wastes from the manufacturing process and the Facility are deposited into an onsite, Class III landfill that is regulated by WDRs Order 00-009.

Hydrogeologic Conditions

16. The Facility is located near the intersection of North Frontal Fault Zone and the Helendale Fault on a moderately sloping alluvial fan composed of very permeable gravelly sand.
17. The plant's water supply is provided from several groundwater wells, owned and operated by the Discharger and located in Lucerne Valley. The main well is located about 1,000 feet north of the percolation ponds. The water has a TDS concentration of about 500 mg/L. The depth-to-groundwater in the disposal area is about 60 feet.
18. The nearest surface water body to the Facility is Cushenberry Creek, an intermittent stream that is adjacent to the property to the northeast.
19. Zoning within 1000 feet of the evaporation/percolation ponds is heavy industrial.
20. Annual precipitation in the local area averages less than 10 inches.

Basin Plan, Beneficial Uses, and Regulatory Considerations

21. The Water Quality Control Plan for the Colorado River Basin (Basin Plan), which was adopted on November 17, 1993 and amended on March 7, 2017, designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan (including amendments adopted by the Colorado River Basin Water Board to date). Pursuant to Water Code section 13263, subdivision (a), waste discharge requirements must implement the Basin Plan and take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241.
22. The discharge is within the Lucerne Hydrologic Subunit, and the Basin Plan designated beneficial uses for groundwater include:
 - a. Municipal Supply (MUN),
 - b. Industrial Supply (IND), and
 - c. Agriculture Supply (AGR).
23. This Order establishes WDRs pursuant to division 7, chapter 4, article 4 of the Water Code (for discharges that are not subject to regulation under section 402 of the Clean Water Act (33 U.S.C. § 1342)).
24. These WDRs implement narrative and numeric water quality objectives for ground and surface waters established by the Basin Plan. The numeric objectives for groundwater designated for municipal and domestic supply (MUN) are the maximum contaminant levels (MCLs) and bacteriological limits specified in California Code of Regulations, title 22, section 64421 et seq. The Basin Plan states that groundwater for use as domestic or municipal water supply must not contain taste or odor-producing substances in concentrations that adversely affect beneficial uses as a result of human activity.
25. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.
26. Water Code section 13267 authorizes the Colorado River Basin Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement state requirements and demonstrate compliance with the Order. The State Water Resources Control Board's (State Water Board) electronic database, GeoTracker Information Systems, facilitates the submittal and review of facility correspondence, Discharger requests, and monitoring and reporting data. The burden, including costs, of this MRP bears a reasonable relationship to the need for that information and the benefits to be obtained from that information.

27. Pursuant to Water Code section 13263, subdivision (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.

Antidegradation Analysis

28. State Water Board Resolution 68-16, entitled *Statement of Policy with Respect to Maintaining High Quality Waters in California* (Antidegradation Policy), generally prohibits the Colorado River Basin Water Board from authorizing discharges that will result in the degradation of high-quality waters, unless it is demonstrated that any change in water quality will (a) be consistent with maximum benefit to the people of the state, (b) not unreasonably affect beneficial uses, and (c) not result in water quality less than that prescribed in state and regional policies (e.g., the violation of one or more water quality objectives). The discharger must also employ best practicable treatment or control (BPTC) to minimize the degradation of high-quality waters.
29. The Colorado River Basin Water Board has determined that some degradation of groundwater from the discharge to the evaporation/percolation ponds is consistent with the Antidegradation Policy because any limited degradation:
- Is confined to a reasonable area;
 - Is minimized by means of full implementation, regular maintenance, and optimal operation of BPTC measures by the Discharger;
 - Does not unreasonably affect any beneficial uses of groundwater prescribed in the Basin Plan, and will not result in the violation of any water quality objective; and
 - Is consistent with the maximum benefit to the people of the state.
30. Constituents in cooling tower discharge that present a potential risk to groundwater quality¹ are TDS and dissolved metals.
- TDS:** The average TDS concentration of the wastewater discharged into the percolations ponds is 600 mg/L, and the average TDS concentration of both the nearby groundwater and the source water is approximately 500 mg/L. Given the small volume of the discharge (300 gallons per day) and the relatively limited increase in the TDS concentration of the wastewater effluent over that of the underlying groundwater, only minimal groundwater degradation is expected to occur and will not unreasonably affect the beneficial uses of groundwater or result in the violation of a water quality objective.
 - Dissolved Metal:** Dissolved metals are not expected to be in concentrations of concern since no additives are used in the cooling tower process; however, they will be monitored annually in the discharge to the ponds and in groundwater to evaluate the potential for degradation to occur.
31. The discharge of excess flow from the cooling towers, as permitted herein, reflects BPTC. The Facility incorporates:
- Controls to monitor the concentrations of waste constituents;

¹ No degradation of surface water will occur because the discharge of effluent is limited to the percolation ponds, and the discharge of wastewater to surface water is prohibited.

- b. Structural controls to dispose of waste constituents in a designated area;
 - c. Staffing to ensure proper operation and maintenance; and
 - d. A standby, emergency power generator of sufficient size to operate the Facility and ancillary equipment during periods of loss of commercial power.
32. Degradation of groundwater by some of the typical waste constituents associated with industrial cooling wastewater—namely, TDS—is consistent with the maximum benefit to the people of the state. The Discharger supports the economic prosperity of the community by the employment of full-time and part-time personnel at the cement manufacturing plant. In addition, the Discharger provides a needed product for a range of businesses and industries. The economic prosperity of surrounding communities and associated industries is of maximum benefit to the people of the state and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order.

Stormwater

33. Federal regulations for stormwater discharges were promulgated by the U.S. Environmental Protection Agency on November 16, 1990 (40 C.F.R. parts 122, 123, and 124) to implement the Clean Water Act's stormwater program set forth in Clean Water Act section 402(p) (33 U.S.C. §1342(p)). In relevant part, the regulations require specific categories of facilities that discharge stormwater associated with industrial activity to "waters of the United States" to obtain National Pollutant Discharge Elimination System (NPDES) permits and to require control of such pollutant discharges using Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to prevent and reduce pollutants and any more stringent controls necessary to meet water quality standards.
34. The State Water Board adopted Water Quality Order 2014-0057-DWQ (NPDES No. CAS000001), *General Permit for Storm Water Discharges Associated with Industrial Activities* (Industrial General Permit), which became effective on July 1, 2015. The Industrial General Permit regulates discharges of stormwater associated with certain industrial activities, excluding construction activities, and requires submittal of a Notice of Intent (NOI) to be covered under the permit. On July 16, 2015, the Colorado River Basin Water Board terminated the Discharger's enrollment in the Industrial General Permit for the Facility, because there is no discharge of stormwater to a water of the United States at the Facility.

CEQA and Public Participation

35. Pursuant to California Code of Regulations, title 14, section 15301, the issuance of these waste discharge requirements, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code, § 21000 et seq.).
36. The Colorado River Basin Water Board has notified the Discharger and all known interested agencies and persons of its intent to issue waste discharge requirements for

this discharge, and has provided them with an opportunity for a public meeting and an opportunity to submit comments.

37. The Colorado River Basin Water Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Order 01-006 is rescinded upon the effective date of this Order, except for enforcement purposes, and in order to meet the provisions contained in division 7 of the Water Code and regulations adopted thereunder, the Discharger shall comply with the following:

A. Effluent Limitations

1. The discharge shall not contain a Total Dissolved Solids concentration in excess of 400 mg/L above the source water.

B. Pond Specifications

1. A minimum depth of freeboard of two (2) feet shall be maintained at all times in the ponds.
2. The ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, ancillary inflow, and infiltration. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
3. The ponds shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
4. The ponds shall be managed to prevent breeding of mosquitoes, in particular:
 - a. An erosion control program should ensure that small coves and irregularities are not created around the perimeter of the water surface.
 - b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
 - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
5. The ponds shall be maintained and operated so as to maximize infiltration and minimize the increase in salinity of the infiltrating wastewater by evaporation.
6. The Discharger shall remove and properly relocate any wastes that were discharged at this site in violation of these requirements.

C. Discharge Prohibitions

1. Discharge of waste classified as "hazardous," as defined in California Code of Regulations, title 27, section 20164, or "designated," as defined in Water Code section 13173 and California Code of Regulations, title 27, section 20164, is prohibited.

2. The discharge of treated wastewater at a location or in a manner different from that described in this Order is prohibited.
3. The discharge of any wastewater to any surface water or surface drainage courses is prohibited.
4. Surfacing or ponding of wastewater outside of the designated disposal locations is prohibited.
5. Discharge into the unlined ponds shall cease in event of any failure in the disposal system that threatens the beneficial uses of underlying groundwater.
6. The discharge of wastewater to land not owned or authorized for such use by the Discharger is prohibited.
7. The storage, treatment, or disposal of wastes from the Facility shall not cause contamination, pollution, or nuisance as defined in section 13050, subdivisions (k), (l), and (m) of the Water Code.

D. Technical Reports

1. By **March 10, 2019**, the Discharger shall provide an inventory of all hazardous materials that will be handled at the Facility.

E. Standard Provisions

1. **Noncompliance.** The Discharger shall comply with all of the conditions of this Order. Noncompliance is a violation of the Porter-Cologne Water Quality Control Act (Water Code, § 13000 et seq.) and grounds for: (1) an enforcement action; (2) termination, revocation and reissuance, or modification of these waste discharge requirements; or (3) denial of an Order renewal application.
2. **Monitoring and Reporting Program.** The Discharger shall comply with Monitoring and Reporting Program R7-2019-0009 and future revisions thereto, as specified by the Colorado River Basin Water Board's Executive Officer.
3. **Enforcement.** The Colorado River Basin Water Board reserves the right to take any enforcement action authorized by law. Accordingly, failure to timely comply with any provisions of this Order may subject the Discharger to enforcement action. Such actions include, but are not limited to, the assessment of administrative civil liability pursuant to Water Code sections 13323, 13268, and 13350, a Time Schedule Order (TSO) issued pursuant to Water Code section 13308, or referral to the California Attorney General for recovery of judicial civil liability.
4. **Proper Operation and Maintenance.** The Discharger shall at all times properly operate and maintain all systems and components of collection, treatment, and control, installed or used by the Discharger to achieve compliance with this Order. Proper operation and maintenance includes, but is not limited to, effective performance, adequate process controls, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities/systems when necessary to achieve compliance

with this Order. All systems in service or reserved shall be inspected and maintained on a regular basis. Records of inspections and maintenance shall be retained, and made available to the Colorado River Basin Water Board on request.

5. **Reporting of Noncompliance.** The Discharger shall report any noncompliance that may endanger human health or the environment. Information shall be provided orally to the Colorado River Basin Water Board office and the Office of Emergency Services within twenty-four (24) hours of when the Discharger becomes aware of the incident. If noncompliance occurs outside of business hours, Discharger shall leave a message on the Colorado River Basin Water Board's office voicemail. A written report shall also be provided within five (5) business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance.
6. **Duty to Mitigate.** The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment.
7. **Material Changes.** Prior to any modifications which would result in any material change in the quality or quantity of wastewater treated or discharged, or any material change in the location of discharge, the Discharger shall report all pertinent information in writing to the Colorado River Basin Water Board, and if required by the Colorado River Basin Water Board, obtain revised requirements before any modifications are implemented.
8. **Operational Personnel.** The Facility shall be supervised and operated by persons possessing the necessary expertise in the operation and maintenance of industrial wastewater treatment facilities.
9. **Familiarity with Order.** The Discharger shall ensure that all operational personnel are familiar with the content of this Order, and shall maintain a copy of this Order at the site.
10. **Inspection and Entry.** The Discharger shall allow the Colorado River Basin Water Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter the premises regulated by this Order, or the place where records are kept under the conditions of this Order;
 - b. Have access to and copy, at reasonable times, records kept under the conditions of this Order;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
 - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Order or as otherwise authorized by the Water Code, any substances or parameters at this location.
11. **Records Retention.** The Discharger shall retain copies of all reports required by this Order and the associated MRP. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. Records may be

maintained electronically. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Colorado River Basin Water Board's Executive Officer.

12. **Change in Ownership.** This Order is not transferable to any person without written approval by the Colorado River Basin Water Board's Executive Officer. Prior to any change in ownership of this operation, the Discharger shall notify the Colorado River Basin Water Board's Executive Officer in writing at least 30 days in advance. The notice must include a written transfer agreement between the existing owner and the new owner. At a minimum, the transfer agreement must contain a specific date for transfer of responsibility for compliance with this Order and an acknowledgment that the new owner or operator is liable for compliance with this Order from the date of transfer. The Colorado River Basin Water Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate other requirements as may be necessary under the Water Code.
13. **Format of Technical Reports.** The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with chapter 30, division 3, title 23 of the California Code of Regulations, as groundwater raw data uploads electronically over the internet into the State Water Board's GeoTracker database, found at: <https://geotracker.waterboards.ca.gov/>. Documents that are normally mailed by the Discharger, such as regulatory documents, narrative technical monitoring program reports, and such reports submissions, materials, data, and correspondence, to the Colorado River Basin Water Board shall also be uploaded into GeoTracker in the appropriate Microsoft software application, such as word, excel, or an Adobe Portable Document Format (PDF) file. Large documents are to be split into manageable file sizes appropriately labelled and uploaded into GeoTracker. The Facility is assigned GeoTracker Global Identification No. WDR100033340.
14. **Qualified Professionals.** In accordance with Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of California registered professionals (i.e., civil engineer, engineering geologist, geologist, etc.) competent and proficient in the fields pertinent to the required activities. All technical reports required under this Order that contain work plans, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal. Additionally, all field activities are to be conducted under the direct supervision of one or more of these professionals.
15. **Certification Under Penalty of Perjury.** All technical reports required in conjunction with this Order shall include a statement by the Discharger, or an authorized representative of the Discharger, certifying under penalty of perjury under the laws of the State of California, that the reports were prepared under his or her supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluated the information submitted, and that based on his or her inquiry of the person or persons who manage the system, the information submitted is, to the best of his or her knowledge and belief, true, complete, and accurate.

16. **Violation of Law.** This Order does not authorize violation of any federal, state, or local laws or regulations.
17. **Property Rights.** This Order does not convey property rights of any sort, or exclusive privileges, nor does it authorize injury to private property or invasion of personal rights, or infringement of federal, state, or local laws or regulations.
18. **Modification, Revocation, Termination.** This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for an Order modification, rescission, or reissuance, or the Discharger's notification of planned changes or anticipated noncompliance, does not stay any Order condition. Causes for modification include, but are not limited to, the violation of any term or condition contained in this Order, a material change in the character, location, or volume of discharge, a change in land application plans or sludge use/disposal practices, or the adoption of new regulations by the State Water Board, Colorado River Basin Water Board (including revisions to the Basin Plan), or federal government.
19. **Severability.** The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of these requirements shall not be affected.

I, Paula Rasmussen, Acting 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 January 10, 2019.

Signed by

PAULA RASMUSSEN
Acting Executive Officer

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

**MONITORING AND REPORTING PROGRAM NO. R7-2019-0009
FOR
MITSUBISHI CEMENT CORPORATION, OWNER/OPERATOR
CUSHENBURY PLANT INDUSTRIAL WASTEWATER DISPOSAL FACILITY
Lucerne Valley - San Bernardino County**

**Location of Discharge: Southeast Quarter of Section 10, Township 3 North, Range 1 East,
San Bernardino Base and Meridian**

AGeneral Monitoring Provisions

1. This Monitoring and Reporting Program (MRP) is issued pursuant to Water Code section 13267 and describes requirements for monitoring the relevant wastewater system and groundwater quality. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Colorado River Basin Water Board or its Executive Officer.
2. The Discharger owns and operates the wastewater system that is subject to WDRs Order R7-2019-0009. The reports are necessary to ensure that the Discharger complies with the Order. Pursuant to Water Code section 13267, the Discharger shall implement the MRP and shall submit the monitoring reports described herein.
3. The collection, preservation, and holding times of all samples shall be in accordance with United States Environmental Protection Agency (USEPA) approved procedures. Unless otherwise approved by the Colorado River Basin Water Board's Executive Officer, all analyses shall be conducted by a laboratory certified by the State Water Board, Division of Drinking Water's Environmental Laboratory Accreditation Program (ELAP). All analyses shall be conducted in accordance with the latest edition of the *Guidelines Establishing Test Procedures for Analysis of Pollutants* (40 C.F.R. part 136), promulgated by the USEPA.
4. Samples shall be collected at locations approved by the Colorado River Basin Water Board's Executive Officer. If no location is specified, sampling shall be conducted at the most representative sampling point available.
5. All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Colorado River Basin Water Board staff.
6. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. In the event that continuous monitoring equipment is out of service for a period greater than 24-hours, the Discharger shall obtain representative grab samples each day the equipment is out of service. The Discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. The Discharger shall report the period(s) during which the equipment was out of service and if the problem has not been

corrected, shall identify the steps which the Discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.

7. Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that:
 - a. The user is trained in proper use and maintenance of the instruments;
 - b. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
 - c. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
 - d. Field calibration reports are submitted as described in the "Reporting" section of this MRP.

8. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least five (5) years from the date of the sample, measurement, report or application. This period may be extended by request of the Colorado River Basin Water Board's Executive Officer at any time.

9. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurement(s);
 - b. The individual(s) who performed the sampling or measurement(s);
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or method used; and
 - f. The results of such analyses.

10. If the Facility is not in operation, or there is no discharge during a required reporting period, the Discharger shall forward a letter to the Colorado River Basin Water Board indicating that there has been no activity during the required reporting period.

A. Wastewater Monitoring

Wastewater discharged to the unlined basin shall be monitored as follows:

Constituents	Units	Type of Sample	Sampling Frequency
Volume of Wastewater to unlined basin (estimate)	GPD ²	Estimate	Bi-annually
Total Dissolved Solids (TDS) of wastewater in basin	mg/L ³	Grab	Bi-annually
Total chromium	mg/L	Grab	Annually
Arsenic	mg/L	Grab	Annually

² GPD - Gallons-per-Day
³ mg/L - Milligrams-per-Liter

<u>Constituents</u>	<u>Units</u>	Type of Sample	Sampling Frequency
Lead	mg/L	Grab	Annually
Antimony	mg/L	Grab	Annually
Copper	mg/L	Grab	Annually
Selenium	mg/L	Grab	Annually
Nickel	mg/L	Grab	Annually
Mercury	mg/L	Grab	Annually
Phosphate	mg/L	Grab	Annually
Total Petroleum Hydrocarbons	µg/L	Grab	Annually

B. Groundwater Monitoring

The groundwater monitoring wells shall be sampled bi-annually, by June and by December, for the following:

<u>Constituents</u>	<u>Units</u>	Type of Sample	Sampling Frequency
Total Dissolved Solids of plant supply water (TDS)	mg/L	Grab	Bi-annually
Total dissolved solids	mg/L	Grab	Bi-annually
Temperature	F°		Bi-annually
Specific conductance	µmohs/cm		Bi-annually
pH			Bi-annually
Carbonate	mg/L	Grab	Bi-annually
Chloride	mg/L	Grab	Bi-annually
Magnesium	mg/L	Grab	Bi-annually
Calcium	mg/L	Grab	Bi-annually
Sulfate	mg/L	Grab	Bi-annually
Iron	mg/L	Grab	Bi-annually
VOC	µg/L	Grab	Bi-annually

The groundwater monitoring wells shall be sampled annually by June, for the following:

<u>Constituents</u>	<u>Units</u>	Type of Sample	Sampling Frequency
Total chromium	mg/L	Grab	Annually
Arsenic	mg/L	Grab	Annually
Lead	mg/L	Grab	Annually
Antimony	mg/L	Grab	Annually
Copper	mg/L	Grab	Annually
Selenium	mg/L	Grab	Annually
Nickel	mg/L	Grab	Annually
Mercury	mg/L	Grab	Annually
Phosphate	mg/L	Grab	Annually
Total Petroleum Hydrocarbons	µg/L	Grab	Annually

The locations of the groundwater monitoring wells are shown in **Attachment C – Monitoring Wells Location Map**. The following table shows information regarding the four monitoring wells, including year drilled, elevation, depth, casing size, and screen depth.

WELL NO	YEAR DRILLED	ELEVATION (ft)	DEPTH (in)	CASING SIZE (in)	SCREEN DEPTH (ft)
MW-1	1991	4242	144	4	124-144
MW-2	1991	4167	93	4	53-93
MW-3	1991	4134	33	4	13-33
MW-4	2000	4240	116	4	205-285

C. Reporting

1. Bi-annual Self-Monitoring Reports (SMRs) shall be submitted by **January 15th** and **July 15th**. Annual SMRs shall be submitted to the Colorado River Basin Water Board by **January 15th of the following year**.
2. The Discharger shall attach a cover letter to the SMRs. The information contained in the cover letter shall clearly identify violations of the WDRs, discuss corrective actions taken or planned, and the proposed time schedule of corrective actions. Identified violations should include a description of the requirement that was violated and a description of the violation.
3. In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the Facility is operating in compliance with the WDRs. Where appropriate, the Discharger shall include supporting calculations (e.g., for monthly averages).
4. The Discharger shall inspect and document any operation and maintenance problems. Operation and maintenance (O&M) reports shall be submitted to the Colorado River Basin Water Board Office with the Discharger's annual SMR, containing documentation showing maintenance and modifications and updates to the Discharger's wastewater treatment and disposal system. The reports shall note any changes in the operating procedure for the season.
5. The SMRs shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this MRP.
6. Each report submitted to the Colorado River Basin Water Board shall contain the following statement:

"I certify under the penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

Executed on the _____ day of _____ at _____

_____ (Signature)"

7. The SMRs and any other information requested by the Colorado River Basin Water Board shall be signed by a principal executive officer or ranking elected official. A duly authorized representative of the Discharger may sign the documents if:
 - a. The authorization is made in writing by the person described above;
 - b. The authorization specified an individual or person having responsibility for the overall operation of the regulated disposal system; and
 - c. The written authorization is submitted to the Colorado River Basin Water Board's Executive Officer.
8. The results of any analysis taken more frequently than required at the locations specified in this MRP shall be reported to the Colorado River Basin Water Board.
9. The Discharger shall report immediately any failure in the waste disposal system as specified in Standard Provisions E.5. Results of any sampling or other analysis performed as a result of a failure of the Facility shall be provided within fourteen days after receipt.
10. As specified in Standard Provisions E.14, technical reports shall be prepared by or under the direction of appropriately qualified professional(s). Each technical report submitted shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal.
11. As specified in Standard Provisions E.13, the Discharger shall comply with Electronic Submittal of Information (ESI) requirements by submitting all correspondence and reports required under MRP R7-2019-0009 and future revisions thereto, including groundwater monitoring data and discharge location data (latitude and longitude), correspondence, and PDF monitoring reports to the State Water Board's Geotracker database. Documents that are 2.0 MB or larger should be broken down into smaller electronic files, labelled properly, and uploaded into Geotracker.

Ordered By: _____

PAULA RASMUSSEN
Acting Executive Officer

January 10, 2019

Date

ATTACHMENT A



Order R7-2019-0009
VICINITY MAP

MITSUBISHI CEMENT CORPORATION, OWNER/OPERATOR
CUSHENBURY PLANT INDUSTRIAL WASTEWATER DISPOSAL FACILITY
Lucerne Valley - San Bernardino County

Location of Discharge: SE Quarter of Section 10, T3N, R1E, SBB&M

ATTACHMENT B

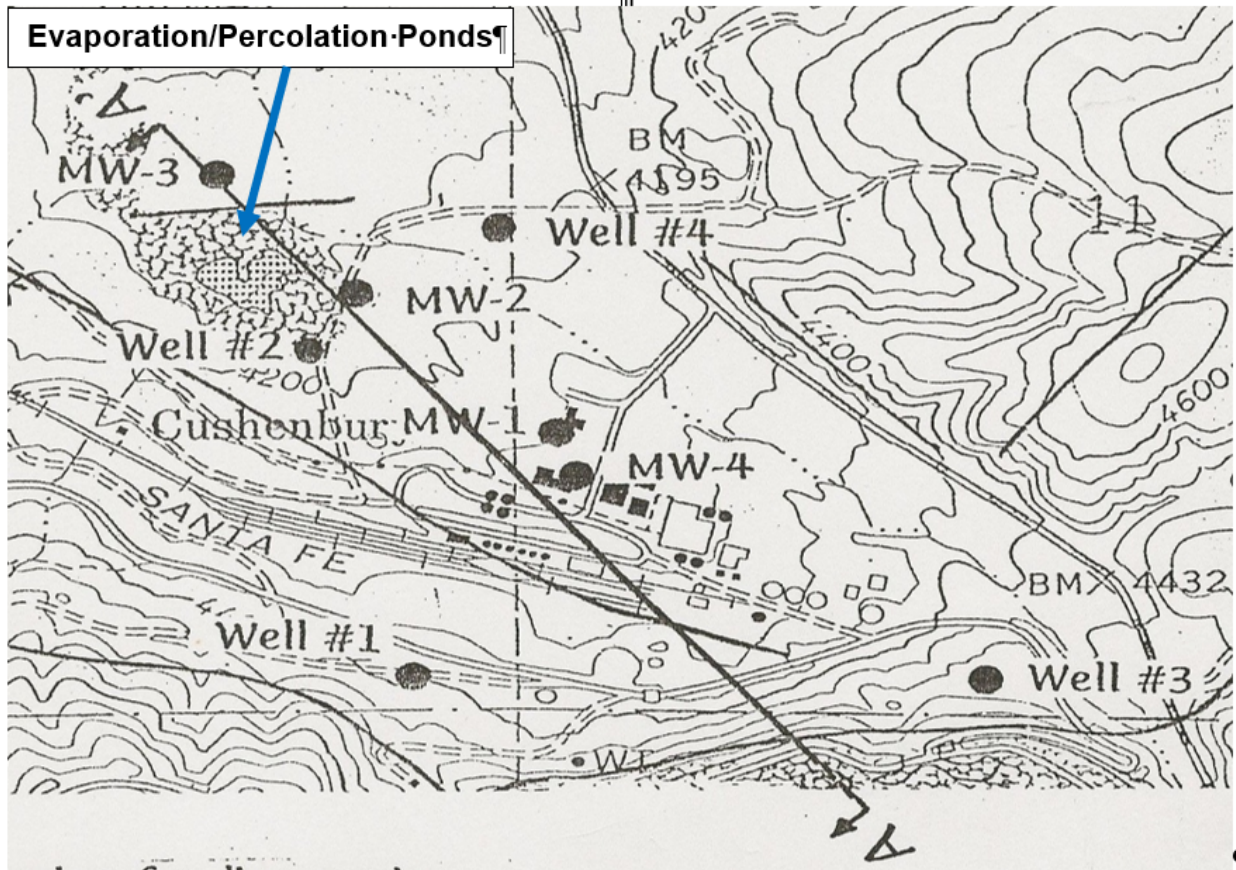


Order R7-2019-0009
SITE MAP

MITSUBISHI CEMENT CORPORATION, OWNER/OPERATOR
CUSHENBURY PLANT INDUSTRIAL WASTEWATER DISPOSAL FACILITY
Lucerne Valley - San Bernardino County

Location of Discharge: SE Quarter of Section 10, T3N, R1E, SBB&M

ATTACHMENT C



Legend:

MW = Monitoring Well

Well = Water Supply Well

MONITORING WELLS LOCATION MAP

MITSUBISHI CEMENT CORPORATION, OWNER/OPERATOR
CUSHENBURY PLANT INDUSTRIAL WASTEWATER DISPOSAL FACILITY
Lucerne Valley - San Bernardino County

Location of Discharge: SE ¼ of Section 10, T3N, R1E, SBB&M