

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

ORDER R7-2015-0018

WASTE DISCHARGE REQUIREMENTS  
FOR  
CITY OF NEEDLES, OWNER  
EUSI, LLC, OPERATOR  
CITY OF NEEDLES WASTEWATER TREATMENT PLANT  
Needles – San Bernardino County

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

1. The City of Needles (Owner), mailing address 817 Third Street, Needles, CA 92363, owns a wastewater collection, treatment and disposal system that provides sewerage service to the City of Needles. The wastewater treatment plant (WWTP or Facility) is operated by EUSI, LLC (Operator), 4501 W. Tierra Buena Ln., Glendale AZ 85306. The City of Needles and EUSI are jointly referred to as City or Discharger.
2. The WWTP, which is located at 516 East Broadway, Needles, CA 92363, has a design treatment capacity of 1.2 million gallons-per-day (MGD) and presently discharges approximately 0.429 MGD into four evaporation/percolation ponds, located in the southwest  $\frac{1}{4}$  of Section 33 Township 9 North, Range 22 West, San Bernardino Baseline and Meridian as shown in Attachment A, Vicinity Map, incorporated herein and made a part of this Board Order by reference.
3. The discharge has been subject to Waste Discharge Requirements (WDRs) prescribed under Board Order 01-160, adopted on November 14, 2001. The Colorado River Basin Water Board has determined that WDRs for the discharge are in need of revision. The WDRs are being updated administratively to incorporate changes in operation and to implement the most current laws and regulations, applicable to the discharge. The treatment process flow is shown in Attachment B, Process Flow Diagram, incorporated herein and made a part of this Board Order by reference.

**Wastewater Treatment Facility and Discharge**

4. The WWTP consists of a mechanical bar screen with a manual by-pass, an aerated grit removal chamber, two 68-foot diameter, 22-foot deep, and 600,000 gallon capacity Sequencing Batch Reactors (SBRs), a 68-foot diameter and 22-foot deep aerobic digester, a 68-foot diameter and 22-foot deep equalization basin, 24 - 100'x20'x2.5' sludge drying beds and four evaporation/percolation ponds.
5. The SBR system is an activated sludge process designed to operate under non-steady state (batch) conditions. Waste stabilization and sedimentation are

carried out in a time sequence rather than the conventional space sequence of continuous flow systems. The SBR system performs separate activated sludge functions in a single tank. The SBR process utilizes four distinct operating phases during each "batch" or SBR treatment cycle. The phases are: 1) *fill*, 2) *react*, 3) *settle*, and 4) *decant* and all occur in the same tank or reactor. The treatment cycle length ranges between four and six hours. During the *fill* phase, raw wastewater is distributed to the individual SBR reactor, and can be kept in an anoxic (non-aerated) state to create microorganisms with good settling characteristics and denitrification, or can be aerated to allow the biomass to begin consumption of the raw wastewater and nitrification. The *react* phase also can be operated with or without aeration, and allows the biomass to consume and stabilize the organics in the wastewater and reduce the biological oxygen demand (BOD), and also allows nitrification and denitrification. The *settle* phase allows the solids to settle, leaving clear, treated water in the upper liquid layer. The purpose of the *decant* phase is to draw treated water from the upper liquid layer of the filled SBR reactor. Sludge wasting typically occurs during the *settle* or *idle* phase.

6. From the collection system, the influent wastewater passes through the mechanical bar screen to separate large solids. The screened influent then passes through a grit chamber where heavy inorganic materials such as sand, eggshells, and cinder will settle, but the lighter organic material will remain in suspension. The influent then enters the SBRs where it will undergo further treatment resulting in clear treated effluent in the upper portion of the reactor and sludge settled at the bottom of the reactor. Waste activated sludge is pumped from the SBR's to the aerobic digester where organics are further reduced. Periodically sludge in the digester is allowed to settle out and concentrate at which time it is pumped into the sludge drying beds and the resultant clear water is returned to the influent line of the plant for further treatment in the SBR's. The clear treated effluent is decanted and stored in the equalization basin. The equalized effluent is then pumped via a 12-inch force main where it will be discharged into the percolation ponds.
7. The sludge drying beds have a total surface area of 48,000 ft<sup>2</sup>. The beds are designed to process a maximum 1.6 MGD of waste activated sludge. The discharger states that dried and solidified sludge is shipped by truck to a licensed landfill for disposal.
8. The four evaporation/percolation ponds have surface areas of 6.13 acres, 5.06 acres, 4.15 acres, and 4.13 acres. The ponds are bounded with a six-foot high chain-link fence with a three-strand barbed wire at the top.
9. The Discharger's Self-Monitoring Reports (SMRs) from January 2010 through December 2014 characterize the WWTP influent as follows:

<u>Constituent</u>	<u>Units</u>	<u>Average</u>	<u>Maximum</u>	<u>Minimum</u>
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<u>Constituent</u>	<u>Units</u>	<u>Average</u>	<u>Maximum</u>	<u>Minimum</u>
Flow	MGD	0.429	0.684	0.298
20° C BOD <sub>5</sub> <sup>1</sup>	mg/L <sup>2</sup>	247	408	139
Total Suspended Solids	mg/L	301	698	107

10. The Discharger's SMRs from January 2010 through December 2014 characterize the WWTP effluent as follows:

<u>Constituent</u>	<u>Units</u>	<u>Average</u>	<u>Maximum</u>	<u>Minimum</u>
20° C BOD <sub>5</sub>	mg/L	4	24	ND
Total Suspended Solids	mg/L	3	25	ND
Dissolved Oxygen	mg/L	2.8	>8.0	<1.0
pH	pH units	7.0	7.4	6.4
Total Dissolved Solids	mg/L	1457	2000	911
Total Phosphate	mg/L	2.02	12.0	0.07
Ammonia	mg/L	1.04	19.1	0.06
Total Nitrogen	mg/L	4.6	13.5	2.2
Nitrate plus Nitrite as N	mg/L	2.43	7.67	ND
Fluoride	mg/L	2.21	4.96	0.52
Sulfate	mg/L	427	578	250
Chloride	mg/L	387	535	193

### Hydrogeologic Conditions

11. Average annual precipitation for the Needles area is four inches. The average annual evaporation rate for the Needles area is 73.57 inches.
12. The Colorado River is located approximately 3,000 feet to the east of the WWTP.
13. There are no active wells within 740 feet of the evaporation/percolation ponds.

<sup>1</sup> 5-day biochemical oxygen demand at 20 degrees Celsius.

<sup>2</sup> milligrams per liter

14. Water supply to the community is from the City of Needles well field that is located one and one half miles north (upgradient) from the WWTP. The well field draws water from the Colorado River Aquifer. Based on values reported in the Discharger's SMRs from January 2010 through December 2014 the water supply shows the following characteristics:

<u>Constituent</u>	<u>Units</u>	<u>Average</u>	<u>Maximum</u>	<u>Minimum</u>
Total Dissolved Solids	mg/L	1170	1510	510
Sulfate	mg/L	396	522	99
Chloride	mg/L	269	493	96

15. Geologic logs for boring numbers 19 and 20 submitted by the Discharger indicate that groundwater was encountered depths of 23 and 26.5 feet below ground surface respectively. The soil encountered in the two borings consists mostly of sandy gravel and gravelly sand.
16. Groundwater under and around the WWTP and the percolation ponds is of good quality with high alkalinity.
17. The discharger states that the WWTP and percolation ponds are located in FIRM zone X (outside the 500-year floodplain).
18. The Discharger states that all the slopes in and around the WWTP, sludge drying beds, and percolation ponds were over-excavated, and where necessary, loose sand was replaced with stable material. In areas where erosion potential exists, rip-rap has been installed.
19. The Discharger reports that berms and earth depressions have been incorporated in the Facility design to contain spills and to protect the Facility against incursion of offsite-water runoff.

#### **Basin Plan, Beneficial Uses, and Regulatory Considerations**

20. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), adopted November 17, 1993 and amended November 16, 2012, designates the beneficial uses of ground and surface waters in this Region, and contains implementation programs and policies to achieve objectives.
21. The discharge is within the Piute Hydrologic Unit. The beneficial uses of groundwater in the Piute Hydrologic Unit include:
- Municipal supply (MUN),
  - Industrial supply (IND), and
  - Agricultural supply (AGR).

22. WDRs implement numeric and narrative water quality objectives for ground and surface waters established by the Basin Plan. The numeric objectives for groundwater designated for municipal and domestic supply are the maximum contaminant levels (MCLs) and bacteriological limits specified in sections 64426.1, 64431, 64432.1 and 64444 et seq. of Title 22, of the California Code of Regulations (CCR). The narrative objectives are:
  - a. Ground water for use as domestic or municipal water supply (MUN) shall not contain taste or odor-producing substances in concentrations that adversely affect beneficial uses as a result of human activity (Basin Plan, page 3-8).
  - b. Discharges of water softener regeneration brines, other mineralized wastes, and toxic wastes to disposal facilities which ultimately discharge in areas where such wastes can percolate to ground water usable for domestic and municipal purposes are prohibited (Basin Plan, page 3-8).
23. 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.
24. Section 13267 of the California Water Code (CWC) authorizes the Colorado River Basin Water Board to require technical and monitoring reports. The MRP establishes monitoring and reporting requirements to implement federal and state requirements.
25. This Order establishes WDRs pursuant to Division 7, Chapter 4, Article 4, of the CWC for discharges that are not subject to regulation under Clean Water Act (CWA) section 402 (33 U.S.C. section 1342).
26. Pursuant to 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.
27. The discharge authorized by this Order, and treatment and storage facilities associated with discharges of treated municipal wastewater, except for discharges of residual sludge and solid waste, are exempt from the requirements of the Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in Title 27, CCR, Division 2, Subdivision 1. This exemption is based on section 20090(a) of Title 27, which states in relevant part that discharges of domestic sewage or treated effluent are exempt provided that such discharges are regulated by WDRs, or for which WDRs have been waived, and which are consistent with applicable water quality objectives, and treatment or storage facilities associated with municipal WWTP's, provided that residual sludges or solid waste from WWTP's shall be discharged only in accordance with the applicable Title 27 provisions.

### **Groundwater Degradation**

28. State Water Board Resolution 68-16, "Policy with Respect to Maintaining High Quality Waters of the State"(Resolution 68-16) states:

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

Resolution 68-16 further states:

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

29. Some degradation of groundwater from the discharge to the evaporation/percolation ponds is consistent with Resolution 68-16, provided that the degradation:
- a. Is confined to a reasonable area;
  - b. Is minimized by means of full implementation, regular maintenance, and optimal operation of BPTC measures;
  - c. Is limited to waste constituents typically encountered in domestic wastewater; and
  - d. Does not result in the loss of any beneficial use as prescribed in the applicable basin plan, or violation of any water quality objective.
30. The discharge of wastewater from the WWTP, as permitted herein, reflects BPTC. The controls assure the discharge does not create a condition of pollution or nuisance, and that water quality will be maintained which is consistent with the anti-degradation provisions of Resolution 68-16. The WWTP incorporates:
- a. Technology for secondary treated domestic wastewater;
  - b. Technology for nitrogen removal;
  - c. Solids handling facilities;
  - d. An operation and maintenance manual;
  - e. Staffing to assure proper operation and maintenance; and

- f. A standby emergency power generator of sufficient size to operate the treatment plant and ancillary equipment during periods of loss of commercial power.
31. Constituents in domestic wastewater effluent that present the greatest risk to groundwater quality are nitrogen, coliforms (pathogen-indicator organisms), and TDS. The WWTP provides substantial removal of soluble organic matter, solids, and nitrogen treatment.
32. Title 22, CCR section 64431, Maximum Contaminant Level (MCL) for Nitrate plus Nitrite as Nitrogen is 10 mg/L and 1.0 mg/L for Nitrite as Nitrogen. To account for the fate of transport for the various components of Total Nitrogen, as a conservative value it is assumed that all nitrogen present converts to nitrate/nitrite. The City's SMRs report an average of 4.5 mg/L for total nitrogen, 2.34 mg/L for nitrate as nitrogen and 0.22 mg/L for nitrite as nitrogen between January 2010 and December 2014 in the effluent. Degradation by nitrogen, if any, will be limited to the area in the vicinity of the evaporation/percolation ponds and, given that total nitrogen, nitrate and nitrite concentrations are below the MCLs, degradation by nitrates should not be significant.
33. While secondary treatment reduces fecal coliform densities by 90 to 99%, the remaining organisms in effluent are still  $10^5$  to  $10^6$  MPN/100 ml (United States Environmental Protection Agency, Design Manual, Municipal Wastewater Disinfection; October 1986). Given the depth to groundwater, pathogen-indicator bacteria are likely to reach groundwater at densities exceeding those prescribed in Title 22, CCR, however the Colorado River, the nearest receptor, is approximately 3,000 feet from the evaporation/percolation ponds. It is not likely that pathogen-indicator bacteria will impact domestic supply wells or the Colorado River.
34. The typical incremental addition of dissolved salts from domestic water usage is 150 to 380 mg/L. Domestic water supply to the community showed an average of about 1170 mg/L during the period of January 2010 to December 2014. The average TDS increase over the domestic water supply for this facility during the same time period was about 280 mg/L.
35. Treated wastewater discharged by the City has a TDS limit of a maximum of 400 mg/L above the domestic source water as regulated by Board Order 01-160. From January 2010 to December 2015 treated wastewater discharged by the City had an average TDS concentration of approximately 1,450 mg/L. The regulatory limit of 400 mg/L above the domestic source water has been successfully maintained by the City and reasonably protects present and anticipated beneficial uses of groundwater in the area; therefore, is not likely that groundwater will exhibit significant degradation by TDS.
36. Groundwater limits equal to water quality objectives for indicator waste

constituents are appropriate and protective of water quality objectives. The City provides a valuable service to the community that is protective of human health and the environment and contributes to economic development in the area. These factors when taken in conjunction with associated increase in waste constituents are consistent with maximum benefit to the people of the State. Accordingly, the discharge as authorized is consistent with the anti-degradation provisions of Resolution 68-16 and the applicable water quality objectives.

### **Stormwater**

37. Federal regulations for storm water discharges were promulgated by the U.S. Environmental Protection Agency on November 16, 1990, (40 CFR Parts 122, 123, and 124) to implement the Clean Water Act's storm water program set forth in Clean Water Act section 402(p) (33 U.S.C. section 1342(p)). In relevant part, the regulations require specific categories of facilities that discharge storm water associated with industrial activity to "waters of the United States" to obtain 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. Facilities used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are within the confines of the facility with a design flow of one million gallons a day or more, or required to have an approved pretreatment program under 40 CFR Part 403, are considered to be engaging in "industrial activity" for purposes of the Clean Water Act's storm water program.

### **CEQA and Public Participation**

38. In accordance with section 15301, Chapter 3, Title 14, CCR, the issuance of these WDRs, 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 (Public Resources Code, section 21000 et seq.).
39. The Colorado River Basin Water Board has notified the Discharger and all known interested agencies and persons of its intent to draft WDRs for this discharge, and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
40. The Colorado River Basin Water Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Board Order 01-160 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 California Water Code, and regulations adopted thereunder, the Discharger shall comply with the following:

**A. Effluent Limitations**

1. Effluent discharged to the evaporation/percolation ponds for disposal shall not exceed the following effluent limits:

<u>Constituent</u>	<u>Units</u>	<u>30-Day<sup>3</sup> Arithmetic Mean</u>	<u>7-Day<sup>4</sup> Arithmetic Mean</u>
20° C BOD <sub>5</sub>	mg/L	30	45
Total Suspended Solids	mg/L	30	45
Nitrate plus Nitrites as Nitrogen	mg/L	10.0	-----

2. Effluent from the WWTP shall not have a pH below 6.0 or above 9.0.

**B. Discharge Prohibitions**

1. Discharge of waste classified as “hazardous”, as defined in Title 23, CCR, section 2521(a), or “designated”, as defined in California Water Code section 13173, is prohibited.
2. Discharge of treated wastewater at a location other than the designated disposal areas is prohibited.
3. The WWTP shall be maintained to prohibit sewage or treated effluent from surfacing or overflowing.
4. The discharge of any wastewater from the facility to any surface waters or surface drainage courses is prohibited.
5. Discharge of waste to land not owned or authorized for such use by the Discharger is prohibited.
6. Surfacing or ponding of wastewater outside of the designated disposal locations is prohibited.

<sup>3</sup> 30-day Mean - The arithmetic mean of pollutant parameter values of samples collected in a period of 30 consecutive days as specified in the Monitoring and Reporting Program.

<sup>4</sup> 7-day Mean - The arithmetic mean of pollutant parameter values of samples collected in a period of 7 consecutive days as specified in the Monitoring and Reporting Program.

7. Bypass, overflow, discharge, or spill of untreated or partially treated waste is prohibited.

### **C. Discharge Specifications**

1. The 30-day average daily dry weather discharge from the WWTP shall not exceed the design treatment capacity of 1.2 MGD.
2. The evaporation/percolation ponds shall be maintained so they will be kept in aerobic conditions. The dissolved oxygen content in the upper zone (one foot) of the evaporation/percolation ponds shall not be less than 1.0 mg/L.
3. The increase in concentration of TDS in the wastewater discharged to the evaporation/percolation ponds over that contained in the water supply to the community shall not exceed 400 mg/L.
4. The 30-day average percent removal of the pollutant parameter BOD<sub>5</sub> and total suspended solids calculated on the basis of analytical results of samples of influent to the SBR and the treated effluent to the percolation ponds shall not be less than 85 percent.
5. A minimum depth of freeboard of two feet shall be maintained at all times in each evaporation/percolation pond.
6. All treatment, storage, and disposal areas shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
7. Ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, ancillary inflow, and infiltration during the non-irrigation season. 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.
8. The treatment or disposal of wastes from the WWTP shall not cause pollution or nuisance as defined in sections 13050(I) and 13050(m) of Division 7 of the California Water Code, respectively.
9. Public contact with non-disinfected wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.
10. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment and disposal area.
11. The evaporation/percolation ponds shall be maintained and operated so as to maximize infiltration and minimize the increase of salinity in the groundwater.

12. There shall be no surface flow of wastewater away from the designated disposal areas.
13. The Discharger shall not accept wastewater in excess of the treatment capacity of the Facility.

#### **D. Groundwater Limitations**

1. Discharge from the WWTP shall not cause groundwater to:
  - a. Contain waste constituents in concentrations statistically greater than background water quality;
  - b. Contain constituents in excess of California Maximum Contaminant Levels (MCLs), as set forth in the California Code of Regulations, Title 22, section 64426.1 for bacteriological constituents; section 64431 for inorganic chemicals; section 64432.1 for nitrates; and section 64444 for organic chemicals;
  - c. Acquire taste, odor, toxicity, or color that creates nuisance or impairs beneficial use.

#### **E. Pretreatment**

1. In the event that the facility has an average dry weather flow or treatment capacity of 5 MGD or more and Industrial Users [40 CFR 403.3(h)] are discharging pollutants which Pass Through [40 CFR 403.3(n)] or Interfere [40 CFR 403.3(i)] with the operation of the wastewater treatment facility or are otherwise subject to National Pretreatment Standards [40 CFR 403.3(j)], (ii) California Code of Regulations, Title 23, section 2233 requires the facility to have and enforce an adequate pretreatment program, or (iii) the Colorado River Basin Water Board or its Executive Officer determines that other circumstances warrant, then:
  - a. The Discharger shall notify the Colorado River Basin Water Board within 30 days after there are discharges that trigger the pretreatment requirements.
  - b. The Discharger shall submit a revised Report of Waste Discharge and the pretreatment program for the Board review and approval as soon as possible but not later than one year of the notice of pretreatment requirements.
  - c. The Discharger shall enforce the federal categorical pretreatment standards on all Categorical Industrial Users (CIUs).
  - d. The Discharger shall notify the CIU of its discharge effluent limits. The limits must be as stringent as the pretreatment standards contained in the applicable federal category (40 CFR Part 400-699). The Discharger may develop more stringent, technically based local limit if it can show cause.
  - e. The Discharger shall notify the RWQCB if the CIU violates its discharge effluent limits.

2. The Colorado River Basin Water Board retains the right to take legal action against an industrial user and/or the Discharger where a user fails to meet the approved applicable pretreatment standards.

## **F. Provisions**

### **Standard Provisions**

1. The Discharger shall comply with all of the conditions of this Board Order. Noncompliance is a violation of the Porter-Cologne Water Quality Control Act (CWC, section 13000 et seq.), and is grounds for enforcement action.
2. The Discharger shall comply with MRP R7-2015-0018, and future revisions thereto, incorporated herein and made part of this Order by reference, as specified by the Colorado River Basin Water Board's Executive Officer.
3. 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 Colorado River Basin Water Board's Executive Officer and in Monitoring and Reporting Program R7-2015-0018. Such specifications are subject to periodic revisions as may be warranted. Documents that are normally sent via mail by the Discharger, such as regulatory reports, documents, submissions, materials, data, and correspondence, to the Colorado River Basin Water Board shall be converted to Portable Document Format (PDF) or other appropriate Microsoft application, such as Excel, and emailed to RB7-wdrs\_paperless@waterboards.ca.gov. Documents that are 50 MB or larger should be transferred to a disk and sent mailed to the Colorado River Basin Water board office in Palm Desert.
4. The Discharger shall not cause degradation of any water supply in accordance with State Water Board Resolution 68-16.
5. Standby power generating facilities shall be available to operate the plant during a commercial power failure.
6. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.
7. The WWTP shall be supervised and operated by persons possessing certification of appropriate grade pursuant to section 3680, Chapter 26, Division 3, Title 23 of the California Code of Regulations.
8. 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 Board Order. Proper operation and maintenance includes 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 Board 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's Executive Officer on request.

9. 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.
10. 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 Board Order, or the place where records are kept under the conditions of this Board Order;
  - b. Have access to and copy, at reasonable times, records kept under the conditions of this Board Order;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under 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.
11. Ponds shall be managed to prevent breeding of mosquitoes. In particular,
  - a. An erosion control program should assure 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.
12. Disposal of oil and grease, biosolids, screenings, and other solids collected from liquid wastes shall be pursuant to Title 27, and the review and approval of the Colorado River Basin Water Board's Executive Officer.
13. Any proposed change in use or disposal of biosolids requires the approval of the Colorado River Basin Water Board's Executive Officer, and U.S. Environmental Protection Agency Regional Administrator, who must be notified at least 90 days in advance of the change.
14. Sludge use and disposal shall comply with Federal and State laws and regulations, including permitting requirements, and technical standards in 40 CFR Part 503. If the State and Colorado River Basin Water Boards are

delegated the authority to implement 40 CFR Part 503 regulations, this Order may be revised to incorporate appropriate time schedules and technical standards. The Discharger shall comply with the standards and time schedules in 40 CFR part 503, whether or not part of this Order.

15. The Discharger shall provide a plan as to the method, treatment, handling and disposal of sludge that is consistent with all State and Federal laws and regulations and obtain prior written approval from the Colorado River Basin Water Board specifying location and method of disposal, before disposing of treated or untreated sludge, or similar solid waste.
16. The Discharger shall maintain a permanent log of all solids hauled away from the treatment facility for use/disposal elsewhere and shall provide a summary of the volume, type (screenings, grit, raw sludge, digested sludge), use (agricultural, composting, etc.), and the destination in accordance with the MRP of this Board Order. Sludge that is stockpiled at the treatment facility shall be sampled and analyzed for those constituents listed in the sludge monitoring section of the MRP of this Board Order and as required by Title 40, Code of Federal Regulations, Part 503. The results of the analyses shall be submitted to the Colorado River Basin Water Board as part of the MRP.
17. The Discharger shall provide a report to the Colorado River Basin Water Board when it determines that the plant's average dry-weather flow rate for any month exceeds 80 percent of the design capacity. The report should indicate what steps, if any, the Discharger intends to take to provide for the expected wastewater treatment capacity necessary when the plant reaches design capacity.
18. Prior to implementing a modification that results in a material change in the quality or quantity of wastewater treated or discharged, or a material change in the location of discharge, the Discharger shall report all pertinent information in writing to the Colorado River Basin Water Board, and obtain revised requirements.
19. Prior to a change in ownership or management of WWTP, 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 Colorado River Basin Water Board.
20. The Discharger shall provide adequate notice to the Colorado River Basin Water Board's Executive Officer of the following:
  - a. The introduction of pollutants into any treatment facility described in the Findings of this Board Order from an indirect Discharger which would be subject to section 301 or 306 of the Clean Water Act, if the pollutants were discharged directly;
  - b. Any substantial change in the volume or character of pollutants introduced

- into any treatment facility described in the Findings of this Board Order, by an existing or new source; and
- c. Any planned physical alteration or addition to the facilities described in this Board Order, or change planned in the Discharger's sludge use or disposal practice, where such alterations, additions, or changes may justify the application of Board Order conditions that are different from or absent in the existing Board Order, including notification of additional disposal sites not reported during the Board Order application process, or not reported pursuant to an approved land application plan.
21. The Discharger shall report orally, any noncompliance that may endanger human health or the environment. The noncompliance shall be reported immediately to the Colorado River Basin Water Board's Executive Officer at (760) 346-7491, and the California Office of Emergency Services at (800) 852-7550 as soon as:
- a. The Discharger has knowledge of the discharge,
  - b. Notification is possible, and
  - c. Notification will not substantially impede cleanup or other emergency measures.

During non-business hours, the Discharger shall leave a message on the Colorado River Basin Water Board's office voice recorder at the above listed number. Incident information shall be provided orally as soon as possible and within 24 hours from the time the Discharger becomes aware of the incident. 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. The Discharger shall report all intentional or unintentional spills in excess of one thousand (1,000) gallons occurring within the WWTP or collection system to the Colorado River Basin Water Board office in accordance with the above time limits.

22. The Discharger shall report all instances of noncompliance. Reports of noncompliance shall be submitted with the Discharger's next scheduled SMR or earlier if requested by the Colorado River Basin Water Board's Executive Officer, or if required by an applicable standard for sludge use and disposal.
23. By-pass (i.e., the intentional diversion of waste streams from any portion of the treatment facilities, except diversions designed to meet variable effluent limits) is prohibited. The Colorado River Basin Water Board may take enforcement action against the Discharger for by-pass unless:
- a. By-pass was unavoidable to prevent loss of life, personal injury, or severe property damage. Severe property damage means substantial physical

- damage to property, damage to the treatment facilities that causes them to be inoperable, or substantial and permanent loss of natural resources reasonably expected to occur in the absence of a by-pass. Severe property damage does not mean economic loss caused by delays in production; and
- There were no feasible alternatives to by-pass, such as the use of auxiliary treatment facilities or retention of untreated waste. This condition is not satisfied if adequate back-up equipment was not installed to prevent by-pass occurring during equipment downtime, or preventive maintenance.
- b. By-pass is:
- i. Required for essential maintenance to assure efficient operation; and
  - ii. Neither effluent nor receiving water limitations are exceeded; and
  - iii. The Discharger notifies the Colorado River Basin Water Board ten days in advance.
24. In the event of an unanticipated by-pass, the Discharger shall immediately report the incident to the Colorado River Basin Water Board. During non-business hours, the Discharger shall leave a message on the Colorado River Basin Water Board office voice recorder. A written report shall be provided within five business days the Discharger is aware of the incident. The written report shall include a description of the by-pass, any noncompliance, the cause, period of noncompliance, anticipated time to achieve full compliance, and steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance.
25. Federal regulations for storm water discharges require specific categories of facilities which discharge storm water associated with industrial activity (storm water) to obtain National Pollutant Discharge Elimination System (NPDES) permits and to implement Best Conventional Pollutant Technology (BCPT) and Best Available Technology Economically Achievable (BAT) to reduce or eliminate industrial storm water pollution.
26. All storm water discharges from this facility must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies, regarding discharges of storm water to storm water drain systems or other courses under their jurisdiction.
27. Storm water discharges from the facility shall not cause or threaten to cause pollution or contamination.
28. Storm water discharges from the facility shall not contain hazardous substances equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and/or 40 CFR Part 302.
29. The Discharger is the responsible party for the WDRs and the MRP for the facility. The Discharger shall comply with all conditions of these WDRs.



Violations may result in enforcement actions, including Colorado River Basin Water Board Orders or court orders, requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Colorado River Basin Water Board.

30. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
31. This Board 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.
32. This Board Order may be modified, rescinded, or reissued, for cause. The filing of a request by the Discharger for a Board Order modification, rescission or reissuance, or notification of planned changes or anticipated noncompliance, does not stay any Board Order condition. Causes for modification include a change in land application plans, or sludge use or disposal practices, and adoption of new regulations by the State or Colorado River Basin Water Board (including revisions to the Basin Plan), or Federal government.

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 March 12, 2015.

Original signed by  
ROBERT PERDUE  
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM R7-2015-0018  
FOR  
CITY OF NEEDLES, OWNER  
EUSI, LLC, OPERATOR  
CITY OF NEEDLES WASTEWATER TREATMENT PLANT  
Needles – San Bernardino County

Location of Discharge:  
SW ¼ of Section 33 T9N, R22W, SBB&M

**A. Monitoring**

1. This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater system and groundwater quality (when needed). This MRP is issued pursuant to California Water Code (CWC) section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.
2. CWC section 13267 states, in part:

“In conducting an investigation specified in subdivision (a), the Colorado River Basin Water Board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the Colorado River Basin Water Board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the Colorado River Basin Water Board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”
3. CWC section 13268 states, in part:

“(a) (1) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor, and may be liable civilly in accordance with subdivision (b). (b) (1) Civil liability may be administratively imposed by a Colorado River Basin Water Board in accordance with Article 2.5 (commencing with section 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.”

4. The Discharger owns and operates the wastewater system that is subject to Board Order R7-2015-0018. The reports are necessary to ensure that the Discharger complies with the Order. Pursuant to Water Code section 13267, the Discharger shall implement the Monitoring and Reporting Program (MRP) and shall submit the monitoring reports described herein.
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. 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.
7. The collection, preservation and holding times of all samples shall be in accordance with U. S. 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 Resources Control Board, Division of Drinking Water. All analyses shall be conducted in accordance with the latest edition of the "Guidelines Establishing Test Procedures for Analysis of Pollutants" (40 CFR Part 136), promulgated by the USEPA.
8. 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 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.
9. 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 Board Order, and records of all data used to complete the application for this Board 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. 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. Samples shall be collected at the location specified in the WDRs. If no location is specified, sampling shall be conducted at the most representative sampling point available.
11. Given the monitoring frequency prescribed by MRP R7-2015-0018, if only one sample is available for a given reporting period, compliance with monthly average, or weekly average Discharge Specifications, will be determined from that sample.
12. 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.

**Influent Monitoring**

13. Influent to the WWTP shall be monitored according to the following schedule:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
Flow	MGD <sup>1</sup>	Metered	Daily	Monthly
20°C BOD <sub>5</sub> <sup>2</sup>	mg/L <sup>3</sup>	24-Hr. Composite	Weekly	Monthly
Total Suspended Solids	mg/L	24-Hr. Composite	Weekly	Monthly

**WWTP Effluent Monitoring**

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<sup>1</sup> Million Gallons per Day  
<sup>2</sup> 5-day Biochemical Oxygen Demand at 20 degrees Celsius.  
<sup>3</sup> milligrams per Liter

14. Effluent from the WWTP shall be monitored according to the following schedule:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
20°C BOD <sub>5</sub>	mg/L	24 Hr. Composite	Weekly	Monthly
Total Suspended Solids	mg/L	24 Hr. Composite	Weekly	Monthly
Dissolved Oxygen <sup>4</sup>	mg/L	Grab at Peak Flow	Weekly	Monthly
pH	s.u. <sup>5</sup>	Grab at Peak Flow	Weekly	Monthly
Total Dissolved Solids	mg/L	24 Hr. Composite	Monthly	Monthly
Total Phosphate	mg/L	24 Hr. Composite	Monthly	Monthly
Ammonia as N	mg/L	24 Hr. Composite	Monthly	Monthly
Total Nitrogen	mg/L	24 Hr. Composite	Monthly	Monthly
Nitrate as N	mg/L	24 Hr. Composite	Monthly	Monthly
Nitrite as N	mg/L	24 Hr. Composite	Monthly	Monthly
Fluoride	mg/L	24 Hr. Composite	Quarterly	Quarterly
Sulfate	mg/L	24 Hr. Composite	Quarterly	Quarterly
Chloride	mg/L	24 Hr. Composite	Quarterly	Quarterly
VOCs <sup>6</sup>	µg/L <sup>7</sup>	Grab	Annually	Annually

#### **Domestic Water Supply**

15. The domestic water supply shall be monitored according to the following schedule:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
Total Dissolved Solids	mg/L	Composite	Monthly	Monthly
Chloride	mg/L	Composite	Monthly	Monthly

<sup>4</sup> Dissolved Oxygen shall be monitored at the upper one foot layer of the evaporation/percolation ponds.

<sup>5</sup> standard pH units.

<sup>6</sup> Analysis of Volatile Organic Compounds is to be accomplished using the USEPA test methods 601 and 602 or 624.

<sup>7</sup> micrograms per liter



- a. A summary of actions taken by the Discharger which ensures industrial-user compliance;
  - b. An updated list of industrial users (by SIC categories) which were issued permits, and/or enforcement orders, and a status of compliance for each user; and
  - c. The name and address of each user that received a revised discharge limit.
4. 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.
  5. Each Report shall contain the following statement:

"I declare under the penalty of law that 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 for knowing violations".
  6. The SMRs, and other information requested by the Colorado River Basin Water Board, shall be signed by a principal executive officer or ranking elected official.
  7. 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 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.
  9. Daily, weekly and monthly monitoring reports shall be submitted to the Colorado River Basin Water Board by the first day of the second month from end of monitoring period. Quarterly monitoring reports shall be submitted by February 1, May 1, August 1, and November 1 of each year. Annual reports shall be submitted by February 1 of each year.
  10. The Discharger shall submit technical, monitoring and all documents that are normally mailed by the Discharger, such as regulatory documents, submissions, materials, data, and correspondence electronically. All information required to be submitted in accordance to this Board Order must be emailed prior to the

regulatory due date. To accomplish electronic submittal of documents the Discharger shall convert the signed original report to Portable Document Format (PDF), other appropriate Microsoft application, such as Excel documents may also be emailed. Email all the documents to [RB7-wdrs\\_paperless@waterboards.ca.gov](mailto:RB7-wdrs_paperless@waterboards.ca.gov). Documents that cannot otherwise be emailed should be transferred to a disk and/or sent hard copy via mail, to:

California Regional Water Quality Control Board  
Colorado River Basin Region  
73720 Fred Waring, Suite 100  
Palm Desert, CA 92260

Original signed by

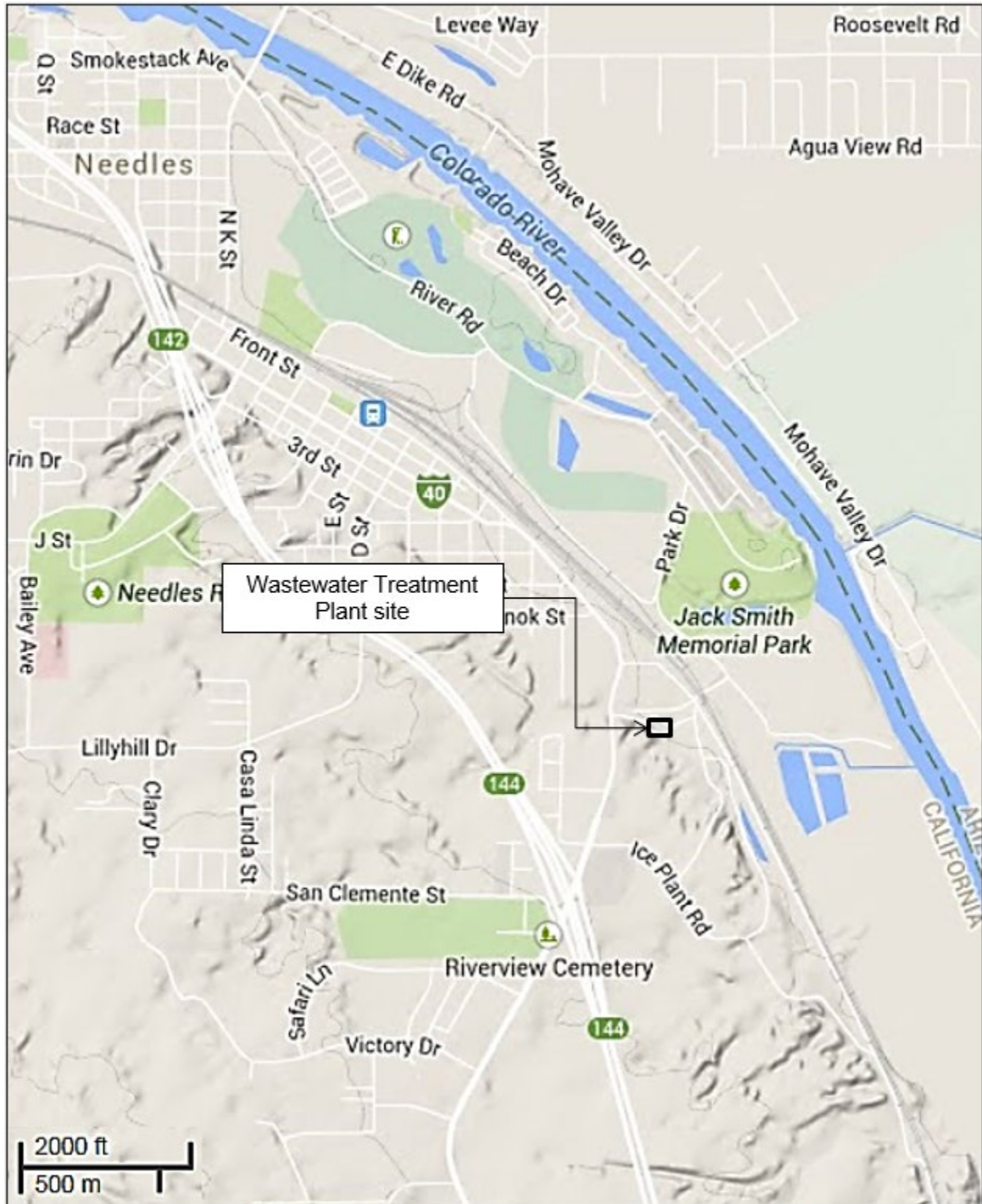
ROBERT PERDUE  
Executive Officer

March 12, 2015

Date

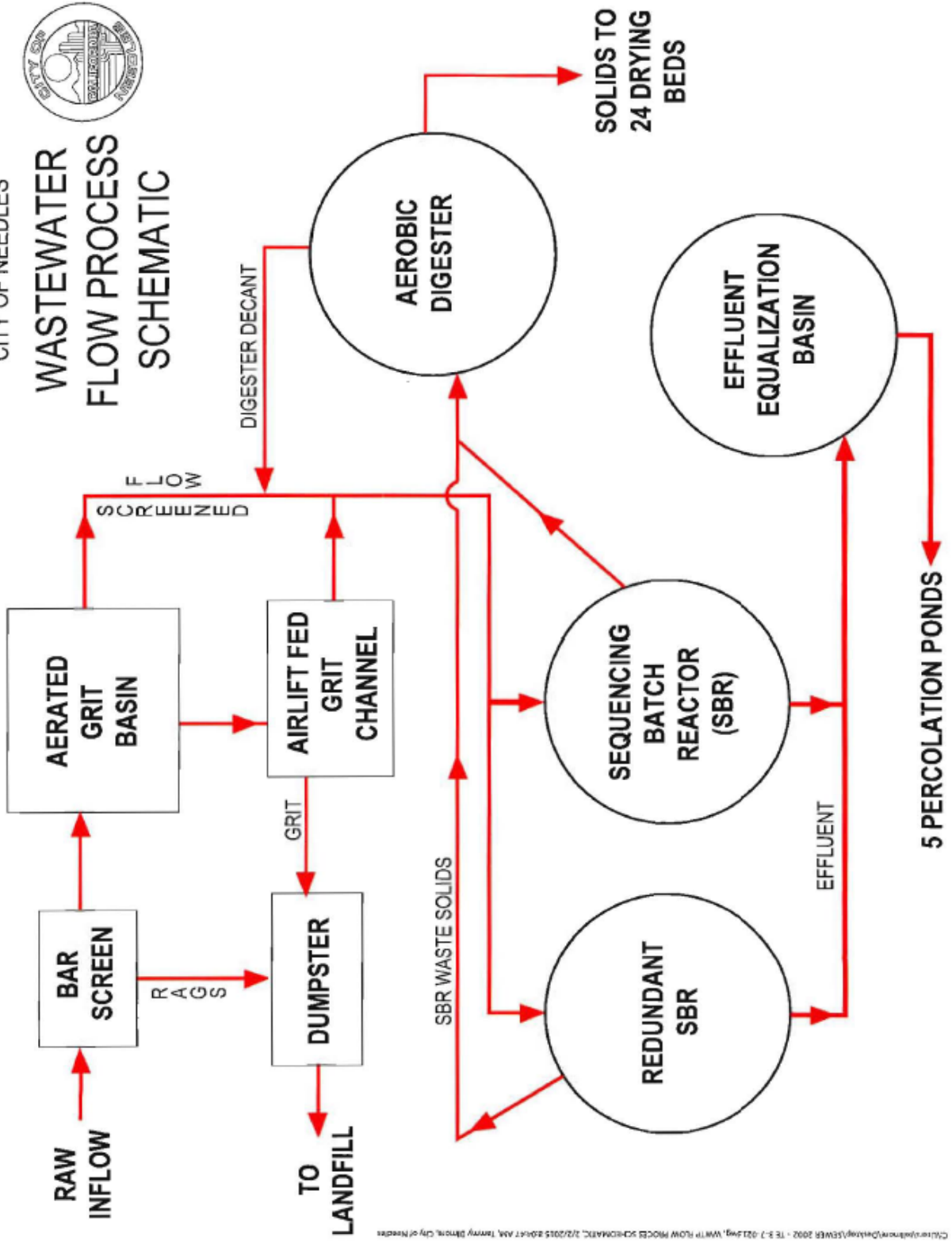


CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION



CITY OF NEEDLES, OWNER/OPERATOR  
WASTEWATER TREATMENT PLANT  
Needles – San Bernardino County  
SW ¼ of Section 33 T9N, R22W, SBB&M

CITY OF NEEDLES  
**WASTEWATER  
 FLOW PROCESS  
 SCHEMATIC**



City of Needles Wastewater Treatment Plant, 2015. Wastewater Treatment Plant Schematic. 2/2/2015 2:04:57 AM. Terry Dixon, City of Needles