CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

ORDER R7-2011-0056

WASTE DISCHARGE REQUIREMENTS FOR

NEEDLES UNIFIED SCHOOL DISTRICT, FACILITY OWNER/OPERATOR
UNITED STATES BUREAU OF LAND MANAGEMENT, LAND OWNER
BIG RIVER ELEMENTARY SCHOOL WASTEWATER TREATMENT AND DISPOSAL SYSTEM

Community of Big River — San Bernardino County

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

- Needles Unified School District, 1900 Erin Drive, Needles, California 92363-2699 (hereinafter referred to as Discharger) submitted a Report of Waste Discharge (ROWD) on January 26, 2010, to discharge treated domestic wastes generated by the Big River Elementary School (BRES) via subsurface drip irrigation (SDI) dispersal. A Preliminary Engineering Feasibility Report, dated March 10, 2009, was also submitted in support of the ROWD.
- 2. The Discharger is building a public elementary (K-8) school that is designed to accommodate 30 staff members and 376 students. The school is located northwest of Klamath Trail and north of Osage Trail in the Big River Area of San Bernardino County, California. The site is located on U.S. Bureau of Land Management (BLM) property in Section 30, T1N, R25E, San Bernardino Baseline and Meridian (SBB&M). The site location is shown in Attachment A, attached hereto and made part of this Order by reference.

Wastewater Treatment System and Discharge Dispersal

- 3. The Discharger proposes to build an on-site wastewater treatment facility (WWTF) to treat and dispose of high strength domestic sewage generated by the elementary school. The peak daily design flow rate for the facility is 6,240 gallons per day (gpd) and the peak average daily design flow rate is 3,500 gpd. The WWTF will consist of several components as described below. A flow schematic diagram is shown in Attachment B, attached hereto and made part of this Order by reference.
- 4. <u>Fat, Oil, and Grease (FOG) Removal</u> The full service kitchen will serve two meals per school day on disposable plates and trays. An appropriately sized grease removal device (GRD) will be installed for each of the two kitchen sinks. Both sinks will discharge through the GRD and into a 1,500 gallon 2-chamber grease interceptor before being routed to the WWTF.
- 5. <u>Primary Septic Tank (PST)</u> A 15,000 gallon primary septic tank will receive waste from all contributing building components.

- 6. Flow Splitter Vault A 30-inch diameter vault will divert 20 percent of the wastewater flow to the Equalization Treatment Tank and the remaining 80 percent to the Secondary Nitrification Treatment Tanks.
- 7. <u>Equalization Treatment Tank</u> This 5,000 gallon tank will store a portion of the wastewater and redistribute it to the Secondary Nitrification Treatment Tanks over the weekend to maintain the bacteria population necessary to provide effective treatment.
- 8. <u>Secondary Nitrification Treatment</u> The secondary nitrification treatment system will employ a recirculating media filter technology consisting of two SeptiTech M3000DUV processors (manufacturer's term) each housed in an 8,000 gallon tank. The Discharger has determined that the total treatment capacity of the two units is 6,300 gallons per day (gpd).
- 9. <u>Denitrification Treatment</u> The denitrification system consists of two upflow filters housed in two 12,000 gallon, three-chambered tanks filled with enhanced nutrient removal (ENR) fixed media. A supplemental carbon-feed system will be used to ensure that the optimum treatment conditions exist for denitrification.
- 10. <u>Disinfection</u> Disinfection is accomplished by a pressure ultraviolet (UV) system installed in a 30-inch diameter valve box enclosure.
- 11. <u>Effluent Dispersal System</u> Effluent from the WWTF will be disposed of using a subsurface drip irrigation (SDI) system that will be buried under 12 inches of soil cover. A design percolation rate of 9.0 minutes per inch (mpi) was used to determine that a leach field area of 7500 square feet for the present disposal area and 7500 square feet for the future reserve disposal area (a total of 15,000 square feet) is required.

Hydrogeologic Conditions

- 12. The Discharger has submitted an Engineering Geology Investigation, dated May 11, 2006, prepared by Gary S. Rasmussen & Associates, and a Geotechnical Investigation, dated June 2, 2006, prepared by John R. Byerly, Inc.
- 13. The site lies within a geomorphic province known as the Mojave Desert Geomorphic Province. The Mojave Desert Geomorphic Province is a large structural block of land bounded on the southwest by the San Andreas fault and the Transverse Ranges; on the north and the northwest by the Garlock fault, the Tehachapi Mountains and the Basin and Range Province; and on the southeast by the Colorado Desert. The Mojave Desert Province also extends eastward into Arizona and southern Nevada. Much of the relief of the Mojave Desert represents remnants of mountainous topography, which are now partially or wholly obscured by erosion and alluvial cover.
- 14. The site is relatively flat with the natural ground surface sloping downward towards the southeast at a rate of approximately 3 percent. Total relief across the site is approximately 15 feet.
- 15. Test borings performed at the site in April 2006 by John Byerly, Inc., indicate that the site is underlain by Pleistocene-age alluvial fan deposits that dip approximately 3 degrees toward the southeast in the vicinity of the site.

- 16. The Discharger reports that the actual depth to groundwater is not known at the site but the Colorado River is the apparent groundwater elevation to the north and the groundwater table typically slopes gently upward and semi-parallel to the ground surface. The site lies at an elevation of approximately 176 feet above the Colorado River which suggests that the ground water beneath the site should be approximately 150 feet below ground surface (bgs). Groundwater was not encountered during test borings of up to 51 feet below the ground surface. No springs or perched groundwater conditions are known to exist under the site.
- 17. A geotechnical investigation conducted at the site in April June 2006 by John R. Byerly, Inc., collected data from fifteen (15) borings, drilled from depths of 14 to 51 feet below ground surface (bgs), indicated the following:
 - a. The site is underlain by silty sands, gravelly sands and varying amounts of cobble;
 - b. Subsurface soils are medium dense to very dense, and
 - c. No groundwater was encountered in the borings.
- 18. Seven additional borings at a maximum depth of 5.2 feet in the area proposed for the SDI system indicated that percolation rates for the area ranged from 0.8 minutes per inch (mpi) to 11.0 mpi. A design rate of 11.0 mpi was used to determine that 1,290 square feet of effective disposal area is needed per 1000 gpd of wastewater.
- 19. The source of domestic water for the school has not been definitively determined. The NUSD will either purchase treated domestic water from the local Indian Tribe's existing water treatment facility, or will develop an on-site water source, which will be treated to remove arsenic and fluoride to acceptable domestic drinking water limits. Any discharge of waste resulting from the development or treatment of domestic water at this site is not covered under this Order.

Basin Plan, Beneficial Uses, and Regulatory Considerations

- 20. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), as amended to date, designates the beneficial uses of ground and surface waters in this Region.
- 21. The proposed discharge is within the Piute Hydrologic Unit. Beneficial uses for groundwater in the Piute Hydrologic Unit include:
 - a. Municipal supply (MUN)
 - b. Industrial supply (IND)
 - c. Agricultural supply (AGR)
- 22. Waste Discharge Requirements (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 are the maximum contaminant levels (MCLs), and bacteriological limits specified in Section 64421 et seq. of Title 22, California Code of Regulations (CCRs). The narrative objectives are:

- a. "Ground water...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...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. Title 27, CCR, Section 20090 exempts certain activities from the requirements of Title 27, CCR, Section 20005 et seq. (hereinafter Title 27). In pertinent part, these exempted activities include discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leachfields, if the following three conditions are met: (a) the applicable Regional Water Board has issued waste discharge requirements; (b) the discharge is in compliance with the applicable water quality control plan; and (3) the wastewater does not need to be managed according to Chapter 11, Division 4.5, Title 22, CCR as a hazardous waste. Because the discharge authorized herein satisfies these conditions, it is exempt from the Title 27 requirements.

Groundwater Degradation

- 24. State Water Resources Control Board (State Water Board) Resolution No. 68-16 ("Policy with Respect on Maintaining High Quality Waters of the State") (hereinafter Resolution No. 68-16) requires a Regional Water Board in regulating the discharge of waste to maintain high quality waters of the state (i.e., background water quality) until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than as described in plans and policies (e.g., violation of any water quality objective). Moreover, the discharge is required to meet WDRs that result in the best practicable treatment or control (BPTC) of the discharge necessary to assure pollution or nuisance will not occur, and highest water quality consistent with maximum benefit to the people will be maintained.
- 25. Some degradation of groundwater from the discharge through the SDI system is consistent with Resolution No. 68-16, provided that this 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.
- 26. The discharge of wastewater from the WWTF, 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 No. 68-16. The WWTF incorporates:

- a. Technology for secondary treated domestic wastewater;
- b. Sludge handling facilities;
- c. An operation and maintenance manual;
- d. Staffing to assure proper operation and maintenance; and
- e. A standby emergency power generator of sufficient size to operate the treatment plant and ancillary equipment during periods of loss of commercial power.
- 27. Constituents in domestic WWTF effluent that present the greatest risk to groundwater quality are nitrogen, coliforms (pathogen-indicator organisms), and dissolved salts (TDS). The proposed WWTFs provide substantial removal of soluble organic matter, solids, and nitrogen. While secondary treatment reduces fecal coliform densities by 90 to 99%, the remaining organisms in effluent are still 10⁵ to 10⁶ MPN/100 ml (United States Environmental Protection Agency, Design Manual, Municipal Wastewater Disinfection; October 1986). Given depth to groundwater and soil types beneath the seepage pits, effluent disinfection is not needed to prevent pathogen-indicator bacteria from reaching groundwater at densities exceeding those prescribed in Title 22, CCR. However, the WWTF, subsurface disposal system, and soils beneath the disposal areas are not likely to prevent groundwater degradation by TDS. Therefore, degradation to groundwater, if any, should be limited to the area underlying the disposal areas, and to salinity constituents.
- 28. The typical incremental addition of dissolved salts from domestic water usage is 150 to 380 mg/L. Considering current water conservation practices, the TDS increase allowed for this project is 300 mg/L. An average limitation of 300 mg/L over the average TDS of the municipal fresh water supply limits salt degradation to a reasonable amount, and reasonably protects present, and anticipated future, beneficial uses of groundwater beneath.
- 29. Groundwater limits equal to water quality objectives for indicator waste constituents are appropriate as well as a more restrictive limit for TDS in groundwater than that prescribed by Title 22, CCRs. The proposed school contributes to the prosperity and economic development of the area. This factor and the associated increase in TDS 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.

Storm Water

30. Federal regulations for storm water discharges were promulgated by the United States Environmental Protection Agency (USEPA) on November 16, 1990 (40 CFR Parts 122, 123, and 124). The regulations require specific categories of facilities which discharge storm water associated with industrial activity to obtain National Pollutant Discharge Elimination System (NPDES) permits and to implement Best Conventional Pollutant Technology (BCPT) to reduce or eliminate industrial storm water pollution.

- 31. The State Water Resources Control Board (SWRCB) adopted Order 97-03-DWQ (General Permit CAS000001) specifying WDRs for discharges of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent (NOI) by industries to be covered under the Permit (General Industrial Permit).
- 32. The Facility is not subject to the federal requirements for regulation of storm water discharges associated with industrial activities since it is not one of the industrial activities listed in 40 CFR 122.26(b)(14). Therefore, the Discharger is not required to obtain coverage under Order 97-03-DWQ (General Permit CAS000001) for the Facility.
- 33. The storm water federal regulations also require discharges of storm water to surface waters associated with construction activity, including clearing, grading, and excavation activities (except operations that result in disturbance of less than five (5) acres of total land area and which are not part of a larger common plan of development or sale) to obtain a National Pollutant Discharge Elimination System (NPDES) permit and to implement Best Conventional Pollutant Control Technology and Best Available Technology Economically Achievable to reduce or eliminate storm water pollution. (40 CFR 122.26(b)(14)(x).) On December 8, 1999, federal regulations promulgated by USEPA (40 CFR Parts 9, 122, 123, and 124) expanded the NPDES storm water program to include, in pertinent part, storm water discharges from construction sites that disturb a land area equal to or greater than one acre and less than five acres, or is part of a larger common plan of development or sale (small construction activity). (40 CFR 122.26(b)(15).)
- 34. To comply with these construction storm water federal requirements, the State Water Resources Control Board (State Water Board) adopted in 1999 Water Quality Order No. 99-08-DWQ (NPDES) General Permit No. CAS000002, "Waste Discharge Requirements (WDRs) for Discharges of Storm Water Runoff Associated with Construction Activity" (Construction General Permit, or CGP). The CGP specifies WDRs for discharges of storm water associated with construction activity that results in a land disturbance of one acre or more or is part of a larger common plan of development or sale. The CGP specifies certain construction activities that are exempted from coverage. Because these exemptions do not apply to the Discharger's proposed construction activity and because this activity will result in a land disturbance of more than 1 acre, the Discharger is subject to the CGP requirements.
- 35. The Discharger complied with the CGP requirements by submitting a Notice of Intent (NOI) and obtaining coverage under the CGP as of August 7, 2007 (WDID: 7 36C348257) for the new elementary school site.
- 36. On September 2, 2009, the State Water Board adopted a new CGP to replace Order No. 99-08-DWQ. The new CGP, Order No. 2009-0009-DWQ (NPDES No. CAS000002), became effective on July 1, 2010. The website link to this new CGP is as follows:
- http://www.waterboards.ca.gov/board decisions/adopted orders/water quality/2009/wqo/w qo2009 0009 dwg.pdf>.
- 37. Pursuant to California Water Code (CWC) Section 13263(g), the discharge of waste is a privilege, not a right, and adoption of this Order does not create a vested right to

continue the discharge.

CEQA and Public Participation

- 38. In accordance with the California Environmental Quality Act (CEQA) (California Public Resources Code Section 21000 et seq.) and implementing CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq), and in accordance with the National Environmental Policy Act (NEPA) (42 U.S.C. Section 4321 et seq.), the NUSD prepared a Joint CEQA Initial Study/NEPA Environmental Assessment (IS/EA) and a Phase I Environmental Site Assessment (ESA) for the proposed elementary school (Project). Based on the IS/EA, the NUSD determined that, although the Project could have a significant effect on the environment, mitigation measures could be adopted that would avoid or mitigate the effects to an extent that would not be significant. The NUSC circulated the IS/EA, ESA, and proposed Mitigated Negative Declaration (SCH No. 2006121103) for public comment. On February 14, 2007, the NUSD filed a Notice of Determination (NOD) with the Clerk of the Board of Supervisors, County of San Bernardino, regarding its approval of the proposed Mitigated Negative Declaration. On November 5, 2007, the Needles Field Office of the BLM issued a Decision Record approving the Project, as reviewed in the EA. The BLM concluded that, conditioned through specified mitigation measures, the action to construct and operate the Project would not result in significant impacts on the human environment pursuant to Title 40 Code of Federal Regulations Section 1508.27(a) and (b)(1)-(10), and that an Environmental Impact Statement was not required. The Regional Water Board has considered the Mitigated Negative Declaration and Decision Record, and the potential impacts to water quality, and has determined that compliance with these waste discharge requirements will prevent any significant adverse impacts to water quality.
- 39. The Monitoring and reporting requirements in Monitoring and Reporting Program R7-2011-0056, attached herein and made a part of this Order by reference, and revisions thereto, are necessary to determine compliance with these WDRs and to determine the Facility's impacts, if any, on receiving waters.
- 40. The Regional 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.
- 41. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to this discharge.

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

A. Discharge Prohibitions

- 1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
- 2. Discharge of waste classified as 'hazardous,' as defined in Title 23, CCR, Section

2521(a), or 'designated,' as defined in CWC Section 13173, is prohibited.

- 3. Bypass or overflow of untreated or partially treated waste is prohibited, except as allowed in Provision E.12.
- 4. Discharge of waste at any point upstream of the WWTF is prohibited.
- 5. Discharge of wastewater from WWTFs, other than into the SDI disposal system described in Finding No. 11 above, is prohibited.
- 6. The WWTF and SDI disposal system shall be maintained to prohibit sewage or treated effluent from surfacing or overflowing.

B. Discharge Specifications

- 1. The 30-day monthly average daily discharge from the WWTF shall not exceed 6,000 gpd.
- 2. Effluent from the WWTF shall not have a pH below 6.0 or above 9.0.
- 3. The treatment or disposal of wastes from this facility shall not cause pollution or nuisance as defined in Sections 13050(I) and 13050(m) of Division 7 of the CWC.
- 4. Public contact with wastewater and the subsurface disposal areas shall be precluded or controlled through fences, signs, or other acceptable alternatives.
- 5. The discharge shall not cause degradation of any water supply.
- 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. Operation of the WWTF shall not cause pollution or nuisance as defined in Sections 13050(I) and 13050(m) of Division 7 of the CWC.
- 8. Effluent from the WWTF shall not exceed the following effluent limits:

| Constituent | Units | Monthly Average | Weekly Average | Daily Maximum |
|--|-------|--------------------|-------------------|------------------|
| BOD ₅ ¹ | mg/L | 30 | 45 | 65 |
| Total Suspended Solids | mg/L | 30 | 45 | 65 |
| Nitrogen (as Total Nitrogen) | mg/L | 10 | 15 | 20 |
| Total Dissolved Solids (TDS) | mg/L | 300 over supply | | |
| ¹ 5-day biochemical oxygen demand at 20 °C. | | | | |

C. Sludge Disposal

- 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 Regional Water Board Executive Officer.
- 2. Any proposed change in use or disposal of biosolids requires the approval of the Regional Water Board Executive Officer, and U.S. Environmental Protection Agency Regional Administrator, who must be notified at least 90 days in advance of the change.
- 3. 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 Regional 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.

D. Groundwater Limitations

- 1. Discharge of waste constituents from leach lines shall not cause groundwater to:
 - a. Contain constituents in excess of the following concentrations:

| Constituent | Units | Limitation | | |
|-----------------------------------|--------------------------|------------|--|--|
| Ammonia (as NH ₄) | mg/L | 1.5 | | |
| Boron | mg/L | 0.7 | | |
| Chloride | mg/L | 106 | | |
| Iron | mg/L | 0.3 | | |
| Manganese | mg/L | 0.05 | | |
| Sodium | mg/L | 60 | | |
| Total Coliform | MPN ¹ /100 mL | < 2.2 | | |
| Organisms | | | | |
| Total Dissolved Solids | mg/L | 470 | | |
| Nitrite (as N) | mg/L | 1 | | |
| Nitrate (as N) | mg/L | 10 | | |
| ¹ Most Probable Number | | | | |

- b. Exhibit a pH of less than 6.5 or greater than 8.5 pH units.
- c. Acquire taste, odor, toxicity, or color that creates nuisance or impairs beneficial use.

E. Provisions

 The Discharger shall comply with Monitoring and Reporting Program (MRP) No. R7-2011-0056, and future revisions thereto, as specified by the Regional Water Board Executive Officer.

- 2. Given the monitoring frequency prescribed by MRP No. R7-2011-0056, 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.
- 3. 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 Regional Water Board, and obtain revised requirements.
- 4. Prior to a change in ownership or management of the WWTF, the Discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Water Board.
- 5. 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.
- 6. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
- 7. Standby, power generating facilities shall be available to operate the plant during a commercial power failure.
- 8. 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 (Cal. Water Code, § 13000 et seq.), and grounds for enforcement action.
- 9. At least 30 days prior to beginning WWTF operations and waste discharge, the Discharger shall submit an engineering report pursuant to Section 13267 of the CWC. The report shall be prepared by a registered civil engineer experienced in the design of domestic wastewater treatment and disposal facilities, and describe:
 - a. The as-built WWTFs and disposal system;
 - b. The type and location of flow metering instruments installed to comply with the effluent flow limit, and MRP No. R7-2011-0056;
 - c. The effluent dispersal system (EDS) including: the number, size, and construction specifications of the EDS system; the area covered by the SDI system, and available standby area for 100% replacement of the SDI system:
 - d. A map to scale (1 inch = 200 feet, or less) providing the location of the WWTFs, disposal area, and property boundaries;
 - e. Certification that the facilities were designed and built to comply with this order; and
 - f. The Operation and Maintenance (O&M) Plans for WWTFs, and subsurface disposal areas. which shall:
 - i. Instruct field personnel to manage daily discharge operations to comply with the terms and conditions of this Order, and make field adjustments to prevent nuisance conditions (e.g., surfacing water);
 - ii. Include nuisance condition, troubleshooting flowcharts for the WWTFs and disposal areas, and notification requirements in case of an emergency;
 - iii. Include an Inspection and Maintenance Plan describing the procedures and

- schedule for inspecting and testing the WWTFs, and necessary maintenance; and
- iv. Provide instructions to determine when to remove grease/scum/sludge from the WWTFs, and proper procedures for disposal of removed solids.
- 10. 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 Regional Water Board Executive Officer on request.
- 11. The Discharger shall report orally, any noncompliance that may endanger human health or the environment. The noncompliance shall be reported immediately to the Regional Water Board Executive Officer, and the Office of Emergency Services 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 Regional Water Board office voice recorder. A written report shall be provided within five (5) business days the Discharger is aware of the incident. The written report shall include a description of the 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. The Discharger shall report all intentional or unintentional spills occurring within the facility or collection system to the Regional Water Board office in accordance with the above time limits.

- 12. 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 Water Board may take enforcement action against the Discharger for by-pass unless:
 - a. (1) 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
 - (2) 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. (1) By-pass is required for essential maintenance to assure efficient operation; and
 - (2) Neither effluent nor receiving water limitations are exceeded; and
 - (3) The Discharger notifies the Board ten (10) days in advance.

The Discharger shall submit notice of an unanticipated by-pass as required in Provision E.11 above.

- 13. The Discharger shall allow the Regional Water Board, or an authorized representative. upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter 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 CWC, any substances or parameters at this location.
- 14. The Discharger shall comply with the following:
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. 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.
 - c. Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurement;
 - (2) The individual who performed the sampling or measurement;
 - (3) The date the analysis was performed;
 - (4) The individual performing the analysis;
 - (5) The analytical technique or method used; and
 - (6) The result of the analysis.

- 15. Unless otherwise approved by the Regional Water Board Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency.
- 16. The Discharger is the responsible party for the WDRs and the Monitoring and Reporting Program (MRP) for the facility. The Discharger shall comply with all conditions of these WDRs. Violations may result in enforcement action, including Regional Water Board orders or court orders that require corrective action or impose civil monetary liability, or modification or revocation of these WDRs by the Regional Water Board.
- 17. The Discharger shall provide adequate notice to the Regional Water Board 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.
 - 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.
- 18. The Discharger shall report all instances of noncompliance. Reports of noncompliance shall be submitted with the Discharger's next scheduled self-monitoring report or earlier if requested by the Regional Water Board Executive Officer, or if required by an applicable standard for sludge use and disposal.
- 19. If any construction takes place after July 1, 2010, the date the new NPDES Construction General Permit (CGP) for storm water discharges became effective (Order No. 2009-0009-DWQ, NPDES No. CAS000002), the Discharger must submit a new NOI to be covered under the new CGP, and shall comply with its requirements.
- 20. 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.
- 21. 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.

- 22. 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.
- 23. 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 Regional 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 November 17, 2011.

Ordered by:

ROBERT PERDUE Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. R7-2011-0056 FOR

NEEDLES UNIFIED SCHOOL DISTRICT, FACILITY OWNER/OPERATOR
UNITES STATES BUREAU OF LAND MANAGEMENT, LAND OWNER
BIG RIVER ELEMENTARY SCHOOL WASTEWATER TREATMENT AND DISPOSAL SYSTEM

Location of Wastewater Treatment Facilities and Discharges: Latitude/Longitude, 34.144° N / 114.390° W

MONITORING

- 1. 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 Regional Water Board Executive Officer, all analyses shall be conducted by a laboratory certified by the California Department of Public Health. 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.
- 2. Samples shall be collected at the locations specified in the Permit. If no locations are specified, sampling shall be conducted at the most representative sampling points available.
- 3. 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 Regional Water Board indicating no activity during the required reporting period.

WASTEWATER TREATMENT FACILITY SECONDARY EFFLUENT MONITORING

The Discharger shall monitoring effluent from the WWTF according to the following schedule:

| Constituents | Units | Type of Sample | Sampling Frequency | Reporting Frequency ¹ |
|------------------------|------------------|-------------------------|--------------------|----------------------------------|
| Flow | gpd ² | Measurment ³ | Weekly | Monthly |
| pН | pH units | Grab | Monthly | Monthly |
| 20° C BOD ₅ | mg/L | Grab | Monthly | Monthly |
| Suspended Solids | mg/L | Grab | Monthly | Monthly |
| Total Nitrogen | mg/L | Grab | Monthly | Monthly |
| Total Dissolved Solids | mg/L | Grab | Monthly | Monthly |
| VOCs ⁴ | μg/L | Grab | Annually | Annually |

When analysis shows noncompliance with the limitations prescribed by Discharge Specification No. B.9, the Discharger shall increase the sampling frequency, for the constituent(s) in noncompliance, to one (1) sample per week, and continue sampling at that minimum frequency until either (a) the sampling shows compliance for two (2) consecutive months or (b) the Executive Officer authorizes the Discharger to resume the normal sampling schedule.

Volatile Organic Compounds

² Gallons per day

³ Average daily flow calculated from weekly meter readings.

WATER SUPPLY TO THE FACILITY

The Discharger shall establish a sampling station to collect representative samples of water supplied to the school for domestic use; and shall provide written notification of the proposed sampling station to the Executive Officer for review and approval. At a minimum, the domestic water supply shall be monitored for the following:

| Constituents | Units | Sampling Frequency |
|--------------------------------|----------|--------------------|
| TDS | mg/L | Monthly |
| рН | pH units | Monthly |
| Standard Minerals ¹ | mg/l | Annually |

Standard Minerals shall include, at a minimum, the following elements/compounds: Calcium, Magnesium, Nitrogen, Potassium, Sulfate, Total Alkalinity (including alkalinity series), and Hardness

REPORTING

- The Discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with Waste Discharge Requirements (WDRs). Where appropriate, the Discharger shall include supporting calculations (e.g., for monthly averages).
- 2. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurement;
 - b. The individual performing the sampling or measurement;
 - c. The date the analysis was performed;
 - d. The individual performing the analysis;
 - e. The analytical technique or method used; and
 - f. The result of the analysis.
- 3. The result of any analysis taken more frequently than required at the locations specified in this Monitoring and Reporting Program (MRP) shall be reported to the Regional Water Board.
- 4. Monitoring reports 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 MRP, and other information requested by the Regional 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. Authorization is made in writing by the person described above;
 - b. Authorization specifies an individual or person having responsibility for the overall operation of the regulated disposal system; and
 - c. Written authorization is submitted to the Regional Water Board Executive Officer.
- 8. Reporting a failure in the facility (wastewater treatment plant, and collection and disposal systems) shall be as described in Provision No. 11. Results of analyses performed shall be provided within 15 days of sample collection.
- 9. The Discharger shall attach a cover letter to the Self Monitoring Report. The cover letter shall clearly identify WDRs violations, discuss corrective actions taken or planned, and propose a time schedule for corrective action (if applicable). Identified violations shall describe the requirement violated, and the nature of the violation.
- 10. Daily, weekly and monthly monitoring reports shall be submitted to the Regional Water Board by the 15th day of the following month. Quarterly monitoring reports shall be submitted to the Regional Water Board by January 15th, April 15th, July 15th, and October 15th, of each year. Annual monitoring reports shall be submitted to the Regional Water Board by January 15th of each year.
- 11. The Discharger shall submit monitoring reports to:

California Regional Water Quality Control Board Colorado River Basin Region 73-720 Fred Waring, Suite 100 Palm Desert, CA 92260

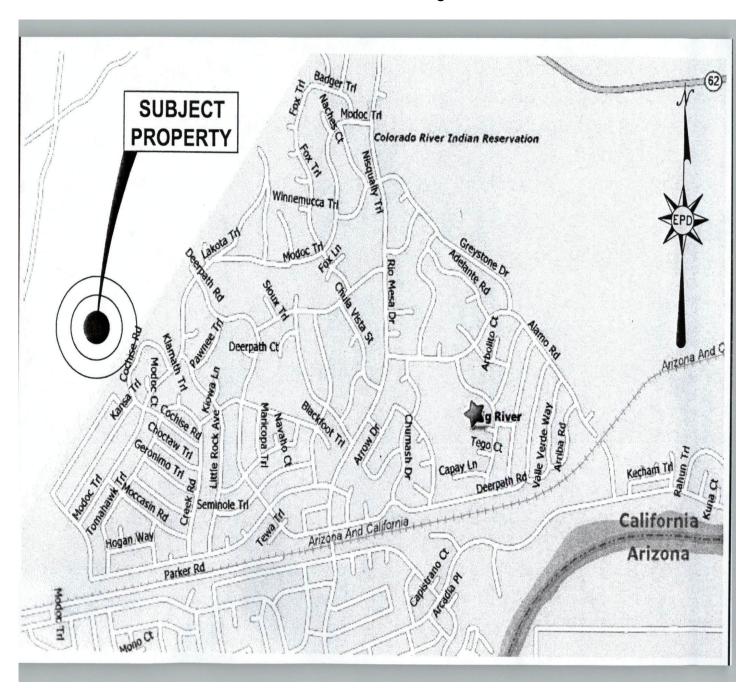
Ordered by:

ROBERT PERDUE Executive Officer

November 17, 2011

Date

California Regional Water Quality Control Board Colorado River Basin Region

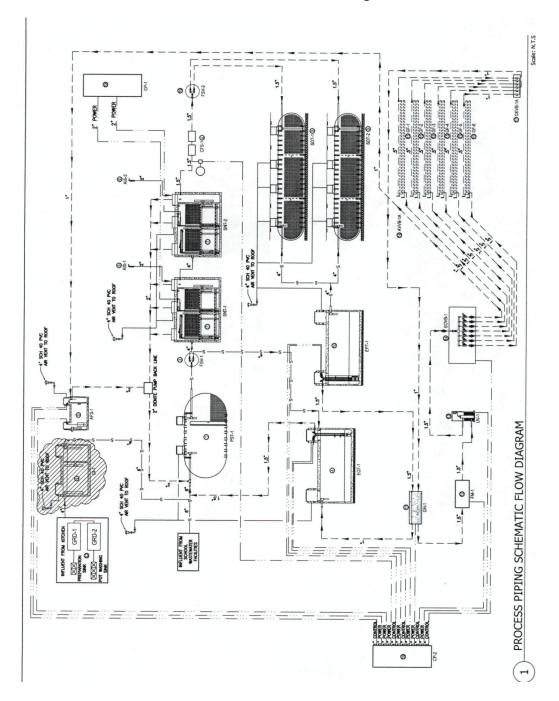


Attachment A - Site Location Map

Needles Unified School District
Big River Elementary School Wastewater Treatment Facility
San Bernardino County

Facility Location: 34.144° N Latitude and 114.390° W Longitude

California Regional Water Quality Control Board Colorado River Basin Region



Attachment B – Treatment System Flow Schematic

Needles Unified School District
Big River Elementary School Wastewater Treatment Facility
San Bernardino County
Facility Location: 34.144° N Latitude and 114.390° W Longitude