CALIFORNIA
Water Boards

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MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

6 July 2015

Mr. Hazem Gabr
Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

NOTICE OF APPLICABILITY (NOA), STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ-R5187, GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS, SOUTHERN CALIFORNIA EDISON COMPANY, BIG CREEK POWERHOUSE NO.1, FRESNO COUNTY

On 31 March 2015, the Southern California Edison Company (hereafter "SCE or Discharger"), submitted a Report of Waste Discharge (RWD) for a upgraded wastewater treatment system at its Powerhouse No. 1 in Big Creek. Based on the information provided, the system treats and disposes of less than 100,000 gallons of wastewater per day, and is therefore eligible for coverage under the general and specific conditions of State Water Resources Control Board (State Water Board) Water Quality Order 2014-0153-DWQ *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order). This letter serves as formal notice that the General Order is applicable to your system and the wastewater discharge described below. You are hereby assigned General Order 2014-0153-DWQ-R5187 for your system.

You should familiarize yourself with the entire General Order and its attachments enclosed with this letter, which describe mandatory discharge and monitoring requirements. Sampling, monitoring, and reporting requirements applicable to your treatment and disposal methods must be completed in accordance with the appropriate treatment system sections of the General Order and the attached *Monitoring and Reporting Program* (MRP) No. 2014-0153-DWQ-R5187. This MRP was developed after consideration of your waste characterization and site conditions described in the attached memorandum.

DISCHARGE DESCRIPTION

SCE owns and operates the existing Big Creek Powerhouse No. 1 Domestic Wastewater Treatment Facility (WWTF) that is regulated by Waste Discharge Requirements (WDRs) Order R5-2012-0048 (NPDES Order CA0079545). The WDRs allow the discharge of tertiary treated wastewater into Big Creek, a Water of the United States.

The WWTF is in Section 28, Township 8 South, Range 25 East. The community of Big Creek provides housing for SCE employees and contractors and the WWTF serves

approximately 180 residents as well as a cookhouse, several smaller offices, and a guest lodge.

SCE proposes to replace the NPDES regulated discharge into Big Creek with a land discharge that includes a combination effluent subsurface dispersal system (leachfield) and landscape irrigation (spray fields) system. SCE is in the process of obtaining approval of the Title 22 Report required for the operation of the spray fields from the State Water Boards, Division of Drinking Water. This General Order limits the discharge to the subsurface disposal system only at this time. The use of spray fields for wastewater disposal may not occur until the Title 22 Report has been approved by the State Water Boards, Division of Drinking Water, and by the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) Executive Officer.

The existing WWTF is a Membrane Bioreactor (MBR) that produces tertiary treated effluent. The treatment system consists of a rotating brush screen to remove solids from the influent, a grit chamber, an anoxic chamber, an aerobic chamber, and membrane filtration chamber. Aluminum sulfate is injected into the anoxic chamber for coagulation and caustic soda is injected into the aerobic zone for pH control. The effluent is disinfected using ultra violet light. As wastewater leaves the disinfection system it is continuously monitored for turbidity, pH, electrical conductivity (EC), and temperature. Solids collected by the brush screen and grit chamber are placed into a dumpster and disposed of offsite. A 52,000 gallon concrete overflow pond is adjacent to the WWTF in case of a treatment system failure or during system maintenance.

The proposed leachfields will cover an area of 50,570 square feet (1.16 acres) and will consist of a pressure distribution system constructed in six cells. The leachfields have a design capacity of 55,000 gpd. The RWD indicates the WWTF will have average daily flow of tertiary treated wastewater of 9,280 gallons per day (gpd) with an estimated daily maximum of 25,360 gpd during peak periods. The RWD indicates WWTF has a design capacity of 60,000 gpd, but per the requirements of Section D of the General Order the average flow from the WWTF cannot exceed an average of 20,000 gpd.

FACILITY SPECIFIC REQUIREMENTS

The Discharger will maintain exclusive control over the discharge, and shall comply with the terms and conditions of this NOA, General Order 2014-0153-DWQ-R5187, with all attachments, and MRP No. 2014-0153-DWQ-R5187.

In accordance with the requirements of the General Order, discharges without shallow groundwater and flow rates that average less than 20,000 gpd are not required to meet a nitrogen effluent limitation.

The General Order states in Section B.1.I that the Discharger shall comply with the setbacks as described in Table 3. This table summarizes different setback requirements for wastewater system equipment, activities, land application areas, and storage and/or

treatment ponds from sensitive receptors and property lines where applicable. The Discharger shall comply with the applicable setback requirements, as summarized in the following table:

Site Specific Applicable Setback Requirements				
Equipment or Activity	**Flowing Stream**	**Ephemeral Stream Drainage**	**Property Line**	**Lake or Reservoir**
Aerobic Treatment Unit, Treatment System, or Collection System [4]	50 ft. [1]	50 ft. [3]	5 ft.	200 ft. 50 ft.
Leach Field [5]	100 ft. [2,3]	50 ft. [3]	5 ft.	200 ft. 100 ft.
LAA (disinfected tertiary recycled water)	25 ft.	50 ft.	25 ft.	200 ft.
Spray Irrigation (disinfected tertiary recycled water)	No spray irrigation of any recycled water, other than disinfected tertiary recycled water, shall take place within 100 feet of a residence or a place where public exposure could be similar to that of a park, playground, or school yard.			

1. Setback established by Onsite Wastewater Treatment System Policy, section 7.5.6.
2. California Well Standards, part II, section 8. Site-specific conditions may allow reduced setback or require an increased setback. See discussion in Well Standards.
3. Setback established by California Plumbing Code, Table K-1.
4. Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System addresses equipment located below ground or that impedes leak detection by routine visual inspection.
5. Leach Field includes all subsurface dispersal systems, including mound systems except seepage pits.

The General Order states in Section D.1.a that the discharge shall not exceed the effluent limitations as described in Table 4. This table summarizes effluent limitations for activated sludge, membrane biological reactor (MPR), or similar treatment systems (not including residential aerobic treatment systems) and treatment systems with flow rates in excess of 20,000 gpd. The Discharger shall comply with the applicable effluent limitations, as summarized in the following table:

Effluent Limitations Based on Technology Performance		
Activated Sludge, MBR [1], or similar (not including residential aerobic treatment units)		
Constituent	**Units**	**Limit**
BOD [2]	mg/L [3]	30 (monthly average), 45 (7-day average)
TSS [4]	mg/L	30 (monthly average), 45 (7-day average)

1. MBR = membrane biological reactor
2. BOD = biochemical oxygen demand
3. mg/L = milligrams per liter
4. TSS = total suspended solids

As mentioned above, SCE is in the process of preparing a Title 22 Technical Report to address using the proposed spray fields as a disposal method. Until SCE has received approval of the Title 22 Technical Report by the State Water Board, Division of Drinking Water and the Executive Officer of the Central Valley Water Board for the reuse of tertiary treated effluent on the spray fields, this General Order 2014-0153-DWQ-R5187 only allows discharge to the leach fields. Upon approval of the Title 22 Technical Report, SCE may request to begin using the spray fields for disposal.

Failure to comply with the requirements in this NOA, General Order 2014-0153-DWQ-R5187, with all attachments, and MRP No. 2014-0153-DWQ-R5187 could result in an enforcement action as authorized by provisions of the California Water Code. Discharge of wastes other than those described in this NOA is prohibited. If the method of waste disposal changes from that described in this NOA, you must submit a new Report of Waste Discharge describing the new operation.

The required annual fee specified in the annual billing from the State Water Board shall be paid until this NOA is officially terminated. You must notify this office in writing if the discharge regulated by the General Order ceases, so that we may terminate coverage and avoid unnecessary billing.

The Central Valley Water Board has gone to a Paperless Office System. All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disk and mailed to the Central Valley Water Board office at 1685 E Street, Fresno, CA 93706. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office: Program: Non-15, WDID: 5C10102009001, Facility Name: Southern California Edison Company, Big Creek Powerhouse No. 1 WWTF, Order-2014-0153-DWQ-R5187.

In order to conserve paper and reduce mailing costs, a paper copy of the General Order has been sent only to the Discharger. Others are advised that the General Order is available on the State Water Board's web site at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0153_dwq.pdf

If you have any questions regarding this matter, please contact Jeff Pyle by phone at (559) 445-5145, by email at jpyle@waterboards.ca.gov.

Clay L. Rodgers

for Pamela C. Creedon
Executive Officer

Attachments: Monitoring and Reporting Program No. 2014-0153-DWQ-R5187
Technical Memorandum for Southern California Edison Company, Big Creek Powerhouse No. 1 WWTF, Report of Waste Discharge
State Water Resources Control Board Order WQ 2014-0153-DWQ (Discharger Only)

cc w/o attachments:

Lisa Elgin, Fresno County Department of Public Works and Planning, 2220 Tulare Street, 6th Floor, Fresno, California 93721
Paul Y. Ahn, Southern California Edison Company, Water Quality Section, 1218 S. Fifth Avenue, Monrovia, California 91016

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5187

FOR

SOUTHERN CALIFORNIA EDISON COMPANY
BIG CREEK POWERHOUSE NO.1 WWTF
FRESNO COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater treatment system. This MRP is issued pursuant to Water Code section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) or Executive Officer.

Water Code section 13267 states, in part:

> "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having 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 regional 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 regional 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."

Water Code section 13268 states, in part:

> "(a) 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 regional 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."

Southern California Edison Company owns and operates the wastewater system that is subject to the Notice of Applicability (NOA) of Water Quality Order 2014-0153-DWQ-R5187. The reports are necessary to ensure that the Discharger complies with the NOA and General Order. Pursuant to Water Code section 13267, the Discharger shall implement this MRP and shall submit the monitoring reports described herein.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The name of the sampler, sample type (grab or composite), time, date, location, bottle type, and any preservative used for each sample shall be recorded on the sample chain of custody form. The chain of custody form must also contain all custody information including date, time, and to whom samples were relinquished. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Central Valley Water Board staff.

Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that they are used by a State Water Resources Control Board, Environmental Laboratory Accreditation Program certified laboratory, or:

1. The user is trained in proper use and maintenance of the instruments;
2. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are maintained and available for at least three years.

If monitoring consistently shows no significant variation in magnitude of a constituent concentration or parameter after at least 12 months of monitoring, the Discharger may request this MRP be revised to reduce monitoring frequency. The proposal must include adequate technical justification for reduction in monitoring frequency.

AEROBIC TREATMENT UNIT MONITORING

Samples of effluent shall be taken at an area that represents the effluent quality distributed to the disposal area. At a minimum, effluent monitoring shall consist of the following:

Constituent	Units [1]	Sample Type	Sampling Frequency	Reporting Frequency
Flow Rate	gpd	Metered [2]	Continuous	Quarterly
Biochemical Oxygen Demand	mg/L	Grab	Monthly	Quarterly
Total Suspended Solids	mg/L	Grab	Monthly	Quarterly

1. gpd = gallons per day and mg/L = milligram per liter.
2. Flow rate may be metered or estimated based on potable water supply meter readings or other approved method. Flow rates may be measured as influent or effluent flow.

Aerobic treatment units may be integrated in a treatment train and all components shall be inspected to verify operational status. Because aerobic treatment units generate more biosolids than septic systems (similar to the activated sludge process), systems shall be inspected and/or pumped at least as frequently as described below. Depending upon the amount of solids removed from the aerobic treatment unit, less frequent inspections may be allowed by the Regional Water Board's Executive Officer. Inspections of sludge and scum depth are not required if the tanks are pumped at least annually.

Parameter	Units	Sample Type	Sample Frequency	Reporting Frequency
Sludge depth and scum thickness in each compartment of each tank	Feet	Staff Gauge	Quarterly	Quarterly
Distance between bottom of scum layer and bottom of outlet device	Inches	Staff Gauge	Quarterly	Quarterly
Distance between top of sludge layer and bottom of outlet device	Inches	Staff Gauge	Quarterly	Quarterly
Effluent filter condition (if equipped, clean as needed)	NA [1]	NA	Quarterly	Quarterly

1. NA = not applicable.

Aerobic treatment units shall be pumped when any one of the following conditions exists:

1. The combined thickness of sludge and scum exceeds one-third of the tank depth of the final settling tank or interferes with the operation of the system (mixed liquor aerator solids shall not exceed the manufacturer's recommendation).
2. The scum layer is within 3 inches of the outlet device.
3. The sludge layer is within 8 inches of the outlet device.

All pumping reports shall be submitted with the next regularly scheduled monitoring report. At a minimum, the record shall include the date, nature of service, service company name, and service company license number.

DISINFECTION SYSTEM MONITORING

Samples shall be collected from immediately downstream of the disinfection system. Disinfection monitoring shall include the following:

Constituent	Units [1]	Sample Type	Sample Frequency	Reporting Frequency
Total Coliform Organisms	MPN/100 mL	Grab	Monthly[2]	Quarterly
Turbidity	NTU	Meter	Continuous	Quarterly

1. MPN/100 mL = most probable number per 100 mL sample. NTU = nephelometric turbidity unit.
2. The monthly sampling requirement for total coliform organisms is required for the discharge of tertiary treated wastewater to the leachfields only. The frequency of sampling for total coliform organisms for discharge to the spray fields will be determined when the Dischargers requests to begin using the spray fields.

SUBSURFACE DISPOSAL AREA

Monitoring shall be sufficient to determine if wastewater is evenly applied, the disposal area is not saturated, burrowing animals and/or deep rooted plants are not present, and odors are not present. Inspection of dosing pump controllers, automatic distribution valves, etc. is required to maintain optimum treatment in the disposal area. Monitoring shall include, at a minimum, the following:

Constituent	Inspection Frequency	Reporting Frequency
Pump Controllers, Automatic Valves, etc. [1]	Quarterly	Quarterly
Nuisance Odor Condition	Quarterly	Quarterly
Saturated Soil Conditions [2]	Quarterly	Quarterly
Plant Growth [3]	Quarterly	Quarterly
Vectors or Animal Burrowing [4]	Quarterly	Quarterly

1. All pump controllers and automatic distribution valves shall be inspected for proper operation as recommended by the manufacturer.
2. Inspect a disposal area for saturated conditions.
3. Shallow-rooted plants are generally desirable, deep-rooted plants such as trees shall be removed as necessary.
4. Evidence of animals burrowing shall be immediately investigated and burrowing animal populations controlled as necessary.

RECYCLED WATER MONITORING

If recycled water is used for irrigation of landscape areas, priority pollutant monitoring is required at the production facility. Sampling shall be consistent with the following:

Constituent	Sampling Frequency	Reporting Frequency
Priority Pollutants	5 years	The next annual report.

SOLIDS DISPOSAL MONITORING

The Discharger shall report the handling and disposal of all solids (e.g., screenings, grit, sludge, biosolids, etc.) generated at the wastewater system. Records shall include the name/contact information for the hauling company, the type and amount of waste transported, the date removed from the wastewater system, the disposal facility name and address, and copies of analytical data required by the entity accepting the waste. These records shall be submitted as part of the annual monitoring report.

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, solids, etc.), and reported analytical or visual inspection results are readily discernible. The data shall be summarized to clearly illustrate compliance with the General Order and NOA as applicable. The results of any monitoring done more frequently than required at the locations specified in the MRP shall be reported in the next regularly scheduled monitoring report and shall be included in calculations as appropriate.

The Central Valley Water Board has gone to a Paperless Office System. All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disk and mailed to the appropriate Regional Water Board office, in this case 1685 E Street, Fresno, CA 93706. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office: Program: Non-15, WDID: 5C10102009001, Facility Name: Southern California Edison Company, Big Creek Powerhouse No. 1 WWTF, Order-2014-0153-DWQ-R5187.

A. Quarterly Monitoring Reports

Quarterly reports shall be submitted to the Regional Water Board on the **first day of the second month after the quarter ends** (e.g. the January-March Quarterly Report is due by May 1st). The reports shall bear the certification and signature of the Discharger's authorized representative. At a minimum, the quarterly reports shall include:

1. Results of all required monitoring.
2. A comparison of monitoring data to the discharge specifications, biochemical oxygen demand and total suspended solids effluent limits, disclosure of any violations of the NOA and/or General Order, and an explanation of any violation of those requirements. (Data shall be presented in tabular format.)
3. If requested by staff, copies of laboratory analytical report(s) and chain of custody form(s).

B. Annual Report

Annual Reports shall be submitted to the Regional Water Board by **March 1st following the monitoring year**. The Annual Report shall include the following:

1. Tabular and graphical summaries of all monitoring data collected during the year.
2. An evaluation of the performance of the wastewater treatment system, including discussion of capacity issues, nuisance conditions, system problems, and a forecast of the flows anticipated in the next year. A flow rate evaluation, as described in the General Order (Provision E.2.c), shall also be submitted.
3. A description of disinfection system maintenance activities performed in the calendar year. The description shall address inspections performed, lamp bulb replacement, lamp sleeve cleaning, and manufacturer recommended maintenance activities.
4. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the NOA and/or General Order.
5. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

6. The name and contact information for the wastewater operator responsible for operation, maintenance, and system monitoring.

A letter transmitting the monitoring reports shall accompany each report. The letter shall report violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. The transmittal letter shall contain the following penalty of perjury statement and shall be signed by the Discharger or the Discharger's authorized agent:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of the 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 fine and imprisonment."

The Discharger shall implement the above monitoring program as of the date of this MRP.

Ordered by:

Clay L. Rodgers
for PAMELA C. CREEDON, Executive Officer

7/6/15
DATE

Central Valley Regional Water Quality Control Board

TECHNICAL MEMORANDUM

TO: Lonnie M. Wass
Supervising Engineer

Clay Rodgers
Assistant Executive Officer

FROM: Jeff Pyle
Engineering Geologist
PG 7375

Scott Hatton
Water Resource Control Engineer
RCE 67889

DATE: 6 July 2015

SUBJECT: APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ, GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS, SOUTHERN CALIFORNIA EDISON COMPANY, BIG CREEK POWERHOUSE NO.1, FRESNO COUNTY

On 31 March 2015, Central Valley Water Board staff (staff) received a Report of Waste Discharge (RWD) for an upgraded wastewater treatment facility (WWTF) at the Southern California Edison Company (SCE) Big Creek Powerhouse No.1 in Fresno County. The RWD includes a Form 200, applicable filing fee, and a technical report certified by Steven Rohrer, a California registered professional mechanical engineer with Arcadis. This memorandum provides a summary of staff's review of the RWD and the applicability of this discharge to be covered under State Water Resources Control Board Order WQ 2014-0153-DWQ, General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems (General Order).

DESCRIPTION OF DISCHARGE

The SCE Big Creek Powerhouse No. 1 Domestic WWTF is currently regulated by Waste Discharge Requirements (WDRs) Order R5-2012-0048 (NPDES Order CA0079545). The WDRs allow for a daily maximum discharge of 23,000 gallons per day (gpd) and the WWTF has a design capacity of 60,000 gpd. The average daily flow

of tertiary treated wastewater from the WWTF is 9,280 gpd. The WWTF serves approximately 180 Big Creek residents as well as a cookhouse, several smaller offices, and a guest lodge.

SCE is proposing to replace the NPDES regulated discharge into Big Creek with a land discharge that includes a combination effluent subsurface dispersal system (leachfield) and land application (spray fields) system. The WWTF itself will remain basically unchanged (chlorination system to be added for future spray field usage), but the method of disposal will change. The use of the spray fields requires the preparation and submittal of a Title 22 Engineering Report that must be approved by State Water Board Division of Drinking Water staff as well as Central Valley Water Board staff before the spray fields can be put into use. This General Order contains language that restricts the disposal of effluent to the leachfields until the Title 22 Report has been approved by the State Water Board Division of Drinking Water and the Central Valley Water Board.

POTENTIAL THREAT TO WATER QUALITY

The WWTF is a Membrane Bioreactor (MBR) that produces tertiary treated effluent. The treatment system consists of a rotating brush screen to remove solids from the influent, a grit chamber, an anoxic chamber, an aerobic chamber, and a membrane filtration chamber. Aluminum sulfate is injected into the anoxic chamber for coagulation and caustic soda is injected into the aerobic zone for pH control. The effluent is disinfected using ultra violet light and then discharged to a 6,000-gallon equalization tank. As wastewater leaves the disinfection system it will be continuously monitored for turbidity, pH, electrical conductivity (EC), and temperature. Solids collected by the brush screen and grit chamber are placed into a dumpster and disposed of offsite. A lined-52,000 gallon concrete overflow pond is adjacent to the WWTF in case of a treatment system failure or for use during system maintenance. Following the equalization tank, tertiary treated wastewater will be discharged to the leachfield. Effluent use for the proposed spray field will be chlorinated in addition to disinfection with ultra violet light.

The proposed disposal systems (leach field and spray fields) will be northeast of the WWTF. The leachfield will be a pressure distribution system consisting of six cells with a total design capacity of 55,000 gpd. There are no groundwater wells in the immediate vicinity of the WWTF and the nearest surface water body, Big Creek, is approximately 300 feet south of the WWTF. A small reservoir is present at the powerhouse and is about 225 feet from the nearest leachfield. These setbacks meet the requirements for treatment systems or leach fields from *Table 3: Summary of Wastewater System Setbacks* of the General Order. The depth to groundwater in the vicinity of the proposed treatment system is unknown due to the hard rock geology. With an average flow rate of 9,280 gpd and in accordance with the requirements of the General Order, discharges with flow rates that average less than 20,000 gpd are not required to meet a nitrogen effluent limitation.

Seven soil borings with depths of five to 16 feet bgs, and seven test pits with depths from three to five feet bgs were advanced within the areas of the proposed leachfields. Surficial soils (silty sand and gravels) and weathered bedrock were reported from five to 16 feet bgs, with granitic bedrock below. Seven percolation tests were conducted in the area of the proposed leachfields. Percolation rates ranged from 1.6 to 22.9 minutes per inch (min/in), with an average of 7.2 min/in. According to *Table 5: Minimum Depth to Groundwater and Minimum Soil Depth from the Bottom of Dispersal System* of the General Order, the minimum depth to groundwater requirement for percolation rates between 5 min/in and 30 min/in is 8 feet bgs.

MONITORING REQUIREMENTS

Monitoring requirements included in the following sections from Attachment C of the General Order are appropriate for this discharge:

- Aerobic Treatment Unit Monitoring (plus effluent monitoring for Total Suspended Solids);
- Disinfection System Monitoring;
- Subsurface Disposal Area;
- Solids Disposal Monitoring;
- Recycled Water Monitoring (upon approval of the Executive Officer);and
- Solids Disposal Monitoring.