

Central Valley Regional Water Quality Control Board

14 May 2014

Mr. Sukhcharan Singh
Guru Nanak Sikh Society of Yuba City
1298 S. George Washington Blvd.
Yuba City, CA 95993

CERTIFIED MAIL
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NOTICE OF APPLICABILITY (NOA) FOR WATER QUALITY ORDER 97-10-DWQ-R5165, GURU NANAK SIKH SOCIETY OF YUBA CITY, GURU NANAK SIKH SOCIETY TEMPLE, SUTTER COUNTY

Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff received a Report of Waste Discharge (RWD) dated 18 July 2012, which was submitted by Apex Civil Designs, Inc. on behalf of the Guru Nanak Sikh Society of Yuba City (Discharger). Additional information for the RWD was submitted in January 2013 and April 2014. The Discharger is planning to construct a 37,000 square foot Sikh Temple on approximately 13 acres of agricultural land in Sutter County (APN No. 22-030-06 in Section 32; T15N, R3E, MDB&M). The planned facility will include a main structure for public assembly and an onsite domestic wastewater treatment and disposal system.

Based on the information provided in the RWD, the discharge of domestic wastewater will satisfy the general and specific conditions of State Water Resources Control Board (State Water Board) Water Quality Order 97-10-DWQ (*General Waste Discharge Requirements for Discharges to Land by Small Domestic Wastewater Treatment Systems*, or "General Order"). Therefore, this letter serves as formal notice that Order 97-10-DWQ is applicable to the site and discharge described below. You are hereby assigned General Order 97-10-DWQ-R5165 for the domestic wastewater system at the facility.

A copy of the General Order is enclosed. The General Order is also posted on the Central Valley Water Board's website at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/wqo97.shtml

You are urged to familiarize yourself with the contents of the entire General Order. The facility must be operated in accordance with the requirements contained in the General Order, Standard Provisions and Reporting Requirements for WDRs, and with the information submitted in the RWD.

FACILITY DESCRIPTION

The Guru Nanak Sikh Temple will be constructed on 29 acres that are currently used as a walnut orchard. The two story temple building will be approximately 37,000 square feet and will include a 10,500 square foot assembly area, kitchen and dining facilities, a gymnasium, and exterior parking and landscaped areas. The remaining 16 acres of the property will continue to be used

as a walnut orchard. Approximately 2.2 acres of the orchard will be used as leachfields for wastewater discharge with an additional 4.2 acres of orchard to be set aside as a replacement area. A site plan showing the planned facility layout and domestic wastewater system is provided as Attachment A of this NOA. The Discharger expects that construction will begin construction in April 2015.

A Notice of Determination was certified by the Sutter County Community Services Department on 18 September 2008, adopting a Negative Declaration for construction of the temple in accordance with the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The Negative Declaration described the property to be constructed as accommodating 300 worshippers for weekly services and up to a maximum of 750 people for occasional special events.

An existing on-site water supply well is located on the north central portion of the property, within the existing walnut orchard. No information is available on the well construction, static water level, or water quality of the supply well. The position of the water supply well with respect to planned leachfield and replacement areas is consistent with Sutter County Environmental Health Services Department requirements.¹

The property also contains an existing rural residence on the northwestern portion of the parcel that will not be disturbed or incorporated into planned development of the property. The residence has a separate septic system, which is permitted through the Sutter County Environmental Health Department. The use and permitting of the rural residence septic system will remain under Sutter County jurisdiction and is separate from this NOA.

DISCHARGE DESCRIPTION

The RWD indicated that the temple will include three main levels of facility operation consisting of approximately 112 people during normal weekdays, 300 people per day during normal Sunday services, and up to 750 people during 15 to 20 special events per year. The wastewater system is designed to accommodate up to a maximum daily flow of 15,000 gallons per day (gpd). Provisions for special events anticipated to exceed 600 people are discussed below.

The wastewater system will have a total storage capacity of 41,500 gallons. Wastewater collected from facility restrooms will be discharged through a 16,500 gallon septic tank, then to a 9,000 gallon septic tank, and then through a 6,500 gallon duplex pump tank for flow equalization prior to discharge into the leachfields. Kitchen waste will be routed through a 9,000 gallon grease tank before being combined with wastewater flow through the septic tanks and then discharged into the leachfields. Wastewater will be filtered after leaving the second septic tank and after the 6,500 flow equalization tank before being discharged into two 1.1-acre leachfields. A generalized wastewater flow diagram is provided as Attachment B of this NOA.

Based on the anticipated range of daily attendance at an average 20 gallons of wastewater generated per visitor, the average daily flow rate is estimated to vary from 6,000 gpd upwards to 15,000 gpd. Wastewater discharge will be conveyed into two 1.1-acre leachfields, which will each be divided into six 8,000-square foot zones that will be cycled to provide even wastewater distribution. The estimated flow to each leachfield zone is approximately 0.002 inches per day during peak flow.

¹ Sutter County Ordinance Code, Chapter 700-090, On-Site Sewage Treatment and Disposal, Table 1

In 2009, four geotechnical soil borings were advanced and sampled in the western half of the property where the planned temple and parking areas will be constructed. The borings were logged for lithology to depths of approximately 20 feet below ground surface (bgs). Shallow soil types consisted primarily of silty sand from near surface to a depth of approximately clayey sand at or below 13 feet bgs. Groundwater was encountered at depths of 15 and 16 feet bgs in two of the soil borings. Percolation testing was not performed.

Based on the geotechnical testing results, a disposal leachfield of 25,000 square feet was estimated to accommodate a total daily flow of up to 15,000 gpd at 0.6 gpd per square foot. Given the variability of percolation rates and to provide a safety factor for flow increases during special events, the proposed leachfield was more than doubled at 96,000 square feet and divided into 12 zones to evenly distribute daily discharge. Subsurface irrigation lines will be installed to a depth of 12 inches bgs in the proposed subsurface drip leachfield. A 100% reserve disposal area will be located adjacent to the leachfield and will be fitted with subsurface disposal lines as needed in case of primary disposal field failure.

For planned special events exceeding the design storage capacity and discharge capability of the leachfields, the Discharger has provided an Operations and Maintenance Plan in the form of a contract with a local engineering contractor. For these events where more than 600 people are anticipated, the Discharger will coordinate with the engineer for daily monitoring of wastewater flow rate. If daily wastewater discharge exceeds 12,000 gpd, the Discharger will coordinate to have portable restroom facilities available at the site should the flow exceed 15,000 gpd. At that point portable restroom facilities will be made available and the on-site restrooms will be locked to prevent further loading of the wastewater system until the event has concluded. It is the Discharger's responsibility to assure that wastewater flow does not exceed the discharge capacity of the system.

A local wastewater disposal firm will be contracted for transportation of septage to a permitted disposal facility. When the combined depth of scum and sludge within any tank is approximately 35 to 50 percent of the tank depth, the tank(s) will be pumped and the septage will be hauled offsite to a septic receiving station.

On April 14, 2014, the Discharger provided a Monitoring Well Installation Work Plan & Groundwater Sampling and Analysis Plan for the planned installation and periodic monitoring of three shallow groundwater monitoring wells at the property. The monitoring wells will be installed around the proposed leachfield area in an orientation to characterize groundwater conditions beneath and immediately downgradient of the leachfield. Because the local direction of shallow groundwater flow and gradient are currently unknown, additional monitoring well(s) may be necessary in the future if the three proposed wells are not ideally positioned to monitoring groundwater flow and detect groundwater degradation.

MONITORING AND REPORTING PROGRAM

The Discharger shall comply with the requirements prescribed in Monitoring and Reporting Program (MRP) R5-2014-0817, which replaces MRP No. 97-10-DWQ for this NOA. MRP R5-2014-0817 is included as Attachment C, which is made part of this NOA by reference. After submittal of a Monitoring Well Installation Report, the first Monitoring Report is to be submitted by the end of the month following the quarter when the groundwater monitoring wells have been installed.

Effective immediately, the Discharger shall comply with the MRP. The first monitoring report shall be submitted by **1 August 2014** and is to cover the 2nd quarter of 2014. If the wastewater system is not in operation, the monitoring reports shall so state and no monitoring is required except for groundwater monitoring. **Effective on the date of monitoring well installations**, the Discharger shall begin groundwater monitoring and reporting in accordance with the MRP. As stated in the MRP, the Monitoring Well Installation Report is due by **31 December 2014**.

GENERAL INFORMATION AND REQUIREMENTS

The Discharger shall comply with the Prohibitions, Requirements, Groundwater and Surface Water Limitations, and Provisions of Water Quality Order 97-10-DWQ. However, Requirements B.3, B.4, and B.6 and Provision D.3 do not apply to this discharge.

Please review this Notice of Applicability carefully to ensure that it completely and accurately reflects the proposed facility and discharge. If the Discharger violates the terms or conditions of the General Order or MRP R5-2014-0817, the Central Valley Water Board may take enforcement action, including assessment of administrative civil liability. Failure to comply with the requirements in the Order could result in an enforcement action as authorized by provisions of the California Water Code. Discharge of wastes other than those described in the RWD is prohibited.

Guru Nanak Sikh Society of Yuba City will generate the waste subject to the terms and conditions of the General Order and will maintain exclusive control over the discharge. As such, Guru Nanak Sikh Society of Yuba City is responsible for compliance with the General Order. Use of septic system for anything other than domestic wastewater discharge is prohibited.

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

Upon issuance of this Notice of Applicability, the Central Valley Water Board's Compliance and Enforcement section will take over management of this case. Brendan Kenny is your new point of contact for any questions about this Order. In addition, all monitoring and technical reports should be submitted to him. The attached Monitoring Report Transmittal Form provided as Attachment D shall be included when submitting each monitoring report. If you find it necessary to make a change to your permitted operations, Brendan Kenny will direct you to the appropriate Permitting staff. You may contact Brendan at (916) 464-4635 or at bkenny@waterboards.ca.gov.

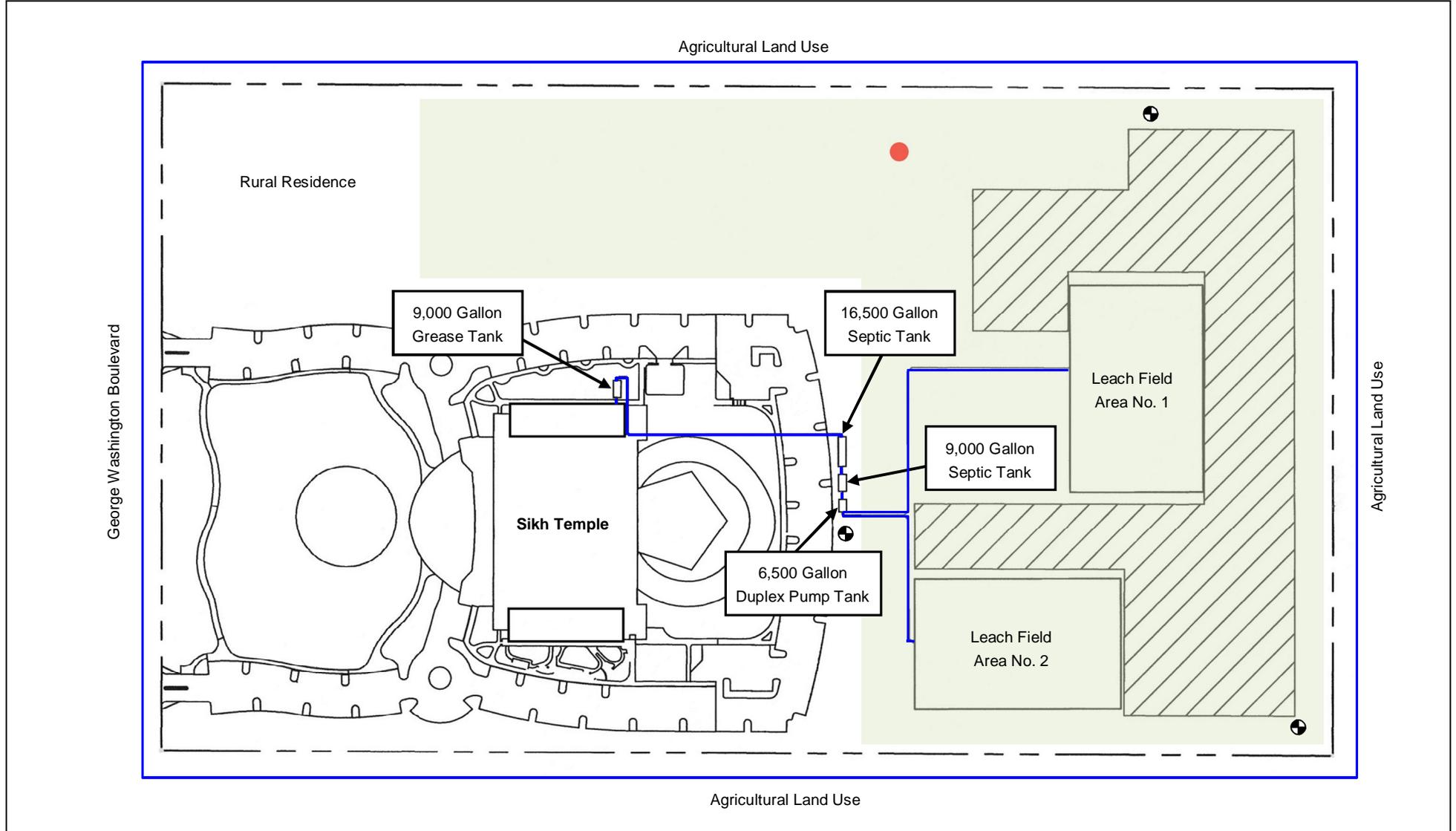
Original signed by Andrew Altevogt for:

PAMELA C. CREEDON
Executive Officer

Attachments: A Site Plan
B Wastewater Flow Schematic
C Monitoring and Reporting Program R5-2014-0817
D Monitoring Report Transmittal Form
E Requirements for Monitoring Well Installation Workplans and Monitoring Well Installation Reports

Enclosure: State Water Resources Control Board Water Quality Order 97-10-DWQ

cc: WDR Program Manager, State Water Resources Control Board, Sacramento
Brendan Kenny, Compliance and Enforcement Section, Central Valley Water Board
Mr. Jan Hill, Sutter County Environmental Health Services, Yuba City
Mr. Christopher Day, P.E., Apex Civil Design, Oregon House

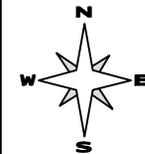


LEGEND

- Water Supply Well
- ⊕ Groundwater Monitoring Well Location (Proposed)
- Replacement Leachfield Area (8.4 Acres)
- Walnut Orchard

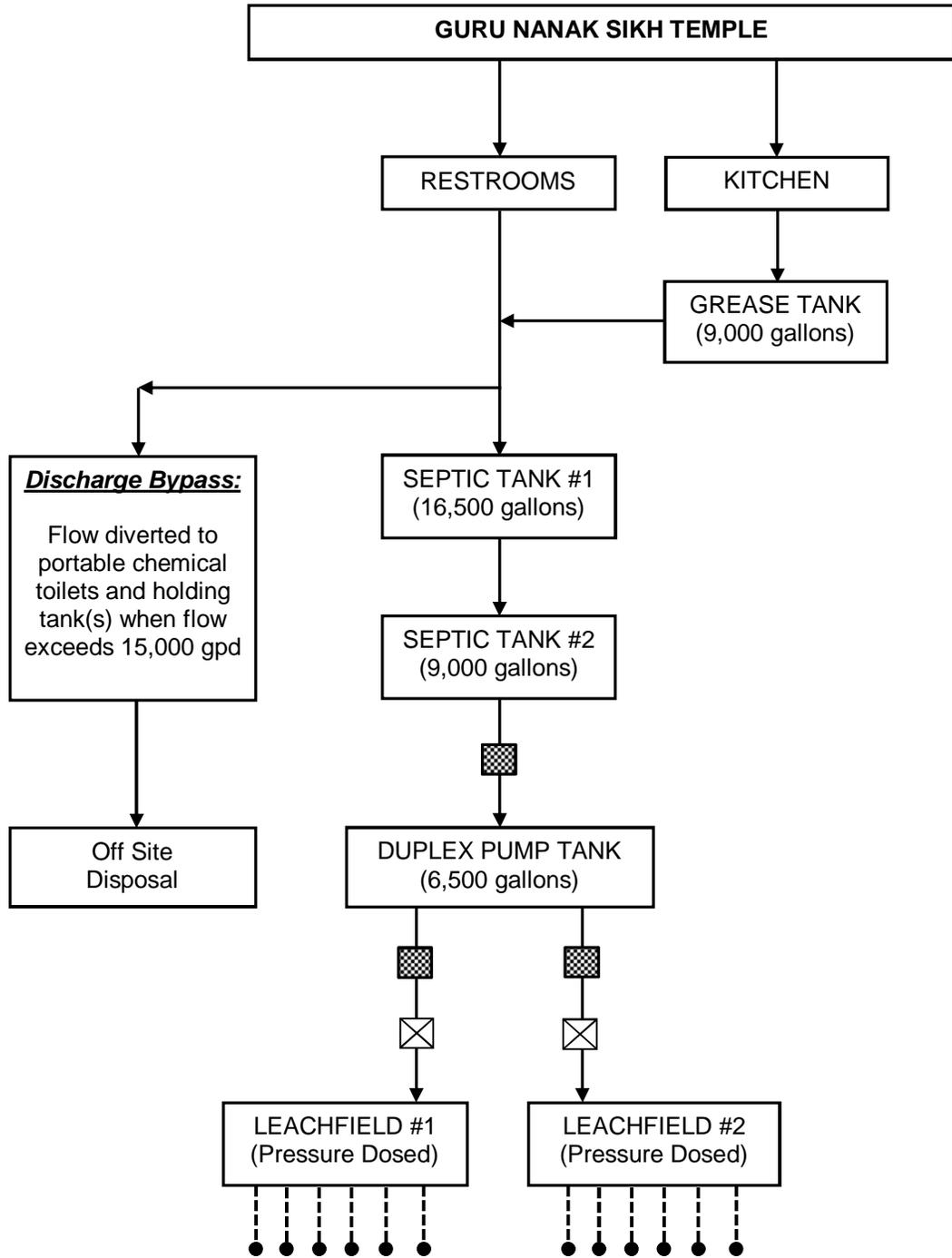
SITE PLAN

GURU NANAK SIKH SOCIETY OF YUBA CITY
 GURU NANAK SIKH TEMPLE
 SUTTER COUNTY



approx. scale
 1 in. = 180 ft.

Modified from Figure SS-700
 Milestone Associates, 2011



LEGEND



Filter



Automatic Distribution Valve

Drawing Reference:

Wastewater Treatment Flow Diagram
Apex Engineering
July 2012

**WASTEWATER FLOW SCHEMATIC
(FUTURE CONDITIONS)**

GURU NANAK SIKH SOCIETY OF YUBA CITY
GURU NANAK SIKH TEMPLE
SUTTER COUNTY

ATTACHMENT D

Monitoring Report Submittal Transmittal Form

Attn: Brendan Kenny (916) 464-4635
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114

Discharger: Guru Nanak Sikh Society of Yuba City
Name of Facility: Guru Nanak Sikh Society Temple
MRP Number: R5-2014-R5165
County: Sutter

I am hereby submitting to the Central Valley Water Board the following information:

Check all that apply:

Monthly Monitoring Report for the month of _____

1st / 2nd / 3rd / 4th (**circle one**) Quarterly Monitoring Report for the year of _____

Annual Monitoring Report for the year _____

Violation Notification

During the monitoring period, there were / were not (circle one) any violations of the WDRs.

1. The violations were:

2. Have the violations been corrected? Yes / No. If no, what will be done to correct the violations:

Certification Statement

"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 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."

Signature: _____ Phone: _____

Printed Name: _____ Date: _____

ATTACHMENT E
REQUIREMENTS FOR MONITORING WELL INSTALLATION WORKPLANS AND
MONITORING WELL INSTALLATION REPORTS

Prior to installation of groundwater monitoring wells, the Discharger shall submit a workplan containing, at a minimum, the information listed in Section 1, below. Wells may be installed after staff approves the workplan. Upon installation of the monitoring wells, the Discharger shall submit a well installation report which includes the information contained in Section 2, below. All workplans and reports must be prepared under the direction of, and signed by, a registered geologist or civil engineer licensed by the State of California.

SECTION 1 - Monitoring Well Installation Workplan and
Groundwater Sampling and Analysis Plan

The monitoring well installation workplan shall contain the following minimum information:

A. General Information:

- Purpose of the well installation project
- Brief description of local geologic and hydrogeologic conditions
- Proposed monitoring well locations and rationale for well locations
- Topographic map showing facility location, roads, and surface water bodies
- Large scaled site map showing all existing on-site wells, proposed wells, surface drainage courses, surface water bodies, buildings, waste handling facilities, utilities, and major physical and man-made features

B. Drilling Details:

- On-site supervision of drilling and well installation activities
- Description of drilling equipment and techniques
- Equipment decontamination procedures
- Soil sampling intervals (if appropriate) and logging methods

C. Monitoring Well Design (in narrative and/or graphic form):

- Diagram of proposed well construction details
 - Borehole diameter
 - Casing and screen material, diameter, and centralizer spacing (if needed)
 - Type of well caps (bottom cap either screw on or secured with stainless steel screws)
 - Anticipated depth of well, length of well casing, and length and position of perforated interval
 - Thickness, position and composition of surface seal, sanitary seal, and sand pack
 - Anticipated screen slot size and filter pack

- D. Well Development (not to be performed until at least 48 hours after sanitary seal placement):
Method of development to be used (i.e., surge, bail, pump, etc.)
Parameters to be monitored during development and record keeping technique
Method of determining when development is complete
Disposal of development water
- E. Well Survey (precision of vertical survey data shall be at least 0.01 foot):
Identify the Licensed Land Surveyor or Civil Engineer that will perform the survey
Datum for survey measurements
List well features to be surveyed (i.e. top of casing, horizontal and vertical coordinates, etc.)
- F. Schedule for Completion of Work
- G. Appendix: Groundwater Sampling and Analysis Plan (SAP)
The Groundwater SAP shall be included as an appendix to the workplan, and shall be utilized as a guidance document that is referred to by individuals responsible for conducting groundwater monitoring and sampling activities.
- H. Provide a detailed written description of standard operating procedures for the following:
- Equipment to be used during sampling
 - Equipment decontamination procedures
 - Water level measurement procedures
 - Well purging (include a discussion of procedures to follow if three casing volumes cannot be purged)
 - Monitoring and record keeping during water level measurement and well purging (include copies of record keeping logs to be used)
 - Purge water disposal
 - Analytical methods and required reporting limits
 - Sample containers and preservatives
 - Sampling
 - o General sampling techniques
 - o Record keeping during sampling (include copies of record keeping logs to be used)
 - o QA/QC samples
 - Chain of Custody
 - Sample handling and transport

SECTION 2 - Monitoring Well Installation Report

The monitoring well installation report must provide the information listed below. In addition, the report must also clearly identify, describe, and justify any deviations from the approved workplan.

A. General Information:

- Purpose of the well installation project
- Brief description of local geologic and hydrogeologic conditions encountered during installation of the wells
- Number of monitoring wells installed and copies of County Well Construction Permits
- Topographic map showing facility location, roads, surface water bodies
- Scaled site map showing all previously existing wells, newly installed wells, surface water bodies, buildings, waste handling facilities, utilities, and other major physical and man-made features.

B. Drilling Details (in narrative and/or graphic form):

- On-site supervision of drilling and well installation activities
- Drilling contractor and driller's name
- Description of drilling equipment and techniques
- Equipment decontamination procedures
- Soil sampling intervals and logging methods
- Well boring log
 - Well boring number and date drilled
 - Borehole diameter and total depth
 - Total depth of open hole (same as total depth drilled if no caving or back-grouting occurs)
 - Depth to first encountered groundwater and stabilized groundwater depth
 - Detailed description of soils encountered, using the Unified Soil Classification System

C. Well Construction Details (in narrative and/or graphic form):

- Well construction diagram, including:
 - Monitoring well number and date constructed
 - Casing and screen material, diameter, and centralizer spacing (if needed)
 - Length of well casing, and length and position of perforated interval
 - Thickness, position and composition of surface seal, sanitary seal, and sand pack
 - Type of well caps (bottom cap either screw on or secured with stainless steel screws)

E. Well Development:

- Date(s) and method of development
- How well development completion was determined
- Volume of water purged from well and method of development water disposal

Field notes from well development should be included in report

- F. Well Survey (survey the top rim of the well casing with the cap removed):
- Identify the coordinate system and datum for survey measurements
 - Describe the measuring points (i.e. ground surface, top of casing, etc.)
 - Present the well survey report data in a table
 - Include the Registered Engineer or Licensed Surveyor's report and field notes in appendix.