CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

REVISED MONITORING AND REPORTING PROGRAM NO. R5-2003-0023 (REV.2)

FOR
COOL VILLAGE INVESTMENTS, LLC.
COOL VILLAGE WASTEWATER TREATMENT FACILITY
EL DORADO COUNTY

This Revised Monitoring and Reporting Program (MRP) describes requirements for monitoring of septic tanks, effluent, leachfield, groundwater and water supply. This MRP is issued pursuant to Water Code Section 13267. Cool Village Investments, LLC (Discharger) shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form.

Field test instruments (such as those used to measure pH and dissolved oxygen) may be used provided that:

1. The operator is trained in the proper use and maintenance of the instruments;
2. The instruments are calibrated prior to each monitoring event;
3. The instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are submitted as described in the “Reporting” section of the MRP.

SEPTIC TANK MONITORING

The Discharger shall monitor all grease traps, all septic tanks, and the treatment system and report this information in the annual reports. Grease traps, septic tanks, and the treatment system shall be inspected annually and pumped as described below.

Parameter	Units	Type of Measurement	Minimum Inspection	Reporting Frequency
Sludge depth and scum thickness in each compartment of each trap, septic tank, and treatment system	Feet	Staff Gauge	Annually	Annually
Distance between bottom of scum layer and bottom of outlet device	Inches	Staff Gauge	Annually	Annually
Distance between top of sludge layer and bottom of outlet device	Inches	Staff Gauge	Annually	Annually

Grease traps, septic tanks, and the treatment system shall be pumped when any one of the following conditions exists or may occur before the next inspection:

a. The combined thickness of sludge and scum exceeds one-third of the tank depth of the first compartment; or,
b. The scum layer is within three inches of the outlet device; or,
c. The sludge layer is within eight inches of the outlet device**.**

EFFLUENT MONITORING

Effluent shall be monitored prior to discharge to the leachfield. Samples shall be collected from the leachfield dosage siphon. Grab samples are considered adequately representative of the wastewater. Effluent monitoring shall include, at a minimum, the following:

Constituents	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Flow	gpd	Metered	Continuous	Monthly
pH	Std. units	Grab	Weekly	Monthly
Total Suspended Solids	mg/L	Grab	Weekly	Monthly
BOD_5 [1]	mg/L	Grab	Weekly	Monthly
Total Coliform Organisms [2]	MPN/100mL	Grab	Weekly	Monthly
Electrical Conductivity	mg/L	Grab	Monthly	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
Total Nitrogen	mg/L	Grab	Monthly	Monthly
Standard Minerals [3]	mg/L	Grab	Annually	Annually

1. BOD_5 denotes five-day, 20° Celsius Biochemical Oxygen Demand.
2. Using a minimum of 15 tubes or three dilutions.
3. Standard Minerals shall include, at a minimum, the following elements and compounds: boron, calcium, iron, magnesium, manganese, sodium, potassium, chloride, sulfate, total alkalinity (including alkalinity series), and hardness.

LEACHFIELD MONITORING

The Discharger shall conduct a visual inspection of the leachfield on a weekly basis and the results shall be included in the monthly monitoring report. Evidence of surfacing wastewater, erosion, field saturation, runoff, or the presence of nuisance conditions shall be noted in the report. If surfacing water is found, then a sample shall be collected and tested for pH, total coliform organisms, and total dissolved solids. In addition to the visual inspections, monitoring of the leachfield shall include the following:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Application Rate	gal/acre•day	Calculated	Monthly	Monthly
Leachline Riser Inspection [1]	Inches	Measurement	Monthly	Monthly

[1] The Discharger shall measure the depth of any wastewater in each observation port riser. The Discharger shall provide the depth of each disposal trench and the corresponding depth of soil remaining between the ponded wastewater and the surface.

GROUNDWATER MONITORING

Groundwater samples shall be collected from each groundwater monitoring well in accordance with an approved groundwater sampling analysis plan. Prior to sampling, depth to groundwater shall be measured to the nearest 0.01 feet. Water table elevations shall be calculated and used to determine groundwater gradient and flow direction. Samples shall be collected and analyzed using approved EPA methods or other methods approved by the Central Valley Water Board. Groundwater monitoring shall include, at a minimum, the following:

Constituent	Units	Type of Sample	Sampling and Reporting Frequency
Depth to Groundwater	0.01 Feet	Measurement	Annually
Groundwater Elevation [1]	0.01 Feet	Calculated	Annually
Gradient Magnitude	Feet/Feet	Calculated	Annually
Gradient Direction	Degrees	Calculated	Annually
Total Coliform Organisms [2]	MPN/100mL	Grab	Annually
pH	Standard Units	Grab	Annually
Electrical Conductivity	mg/L	Grab	Annually
Total Dissolved Solids	mg/L	Grab	Annually
Nitrate Nitrogen	mg/L	Grab	Annually
Standard Minerals [3]	mg/L	Grab	Annually

[1] Groundwater elevation shall be based on depth-to-water using a surveyed measuring point elevation on the well and a surveyed reference elevation.
[2] Using a minimum of 15 tubes or three dilutions.
[3] Standard Minerals shall include, at a minimum, the following elements and compounds: boron, calcium, iron, magnesium, manganese, sodium, potassium, chloride, sulfate, total alkalinity (including alkalinity series), and hardness.

WATER SUPPLY MONITORING

A sampling station shall be established where a representative sample of the municipal water supply can be obtained. Water supply monitoring shall include at least the following for each water source used during the previous year. As an alternative to annual water supply monitoring, the Discharger may submit results of the most current DHS water supply monitoring data.

Constituents	Units	Sampling Frequency	Reporting Frequency
Electrical Conductivity	mg/L	Annually	Annually
Total Dissolved Solids	mg/L	Annually	Annually
Standard Minerals [1]	mg/L	Annually	Annually

[1] Standard Minerals shall include, at a minimum, the following elements/compounds: boron, calcium, iron, magnesium, manganese, sodium, potassium, chloride, sulfate, nitrate, total alkalinity (including alkalinity series), and hardness.

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type, and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the MRP shall be reported to the Central Valley Water Board.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all Groundwater Monitoring Reports shall be prepared under the direct supervision of a California Registered Engineer or Geologist and signed and stamped by the registered professional.

A. Monthly Monitoring Reports

Daily, weekly, and monthly monitoring data shall be reported in monthly monitoring reports. Monthly reports shall be submitted to the Regional Board by the **1st day of the second month** following sampling (e.g., the January Report is due by 1 March). At a minimum the reports shall include:

1. Results of effluent and leachfield monitoring;

2. A comparison of monitoring data to the discharge specifications 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);

4. Copies of field inspection logs; and

5. Date(s) on which the monitoring instruments were calibrated.

B. Annual Monitoring Report

In addition to the monthly monitoring reports, an Annual Report shall be prepared. The Annual Report will include all monitoring data required in the MRP. The Annual Report shall be submitted to the Central Valley Water Board by **1 February** of each year. The Annual Report shall include the following:

1. Groundwater monitoring report.

   a. Results of groundwater monitoring, including a summary of data tables of historic and current water table elevations and analytical results.

b. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for the groundwater monitoring. The narrative shall be sufficiently detailed to verify compliance with the WDRs, this MRP, and the Standard Provisions and Reporting Requirements. Field logs shall support the narrative for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of casing volume; and total volume of water purged.

c. Calculation of groundwater elevations, an assessment of groundwater flow direction and gradient on the date of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends if any.

d. A narrative discussion of the analytical results for all media and locations monitored including spatial and temporal trends, with reference to summary data tables, graphs, and appended analytical reports (as applicable).

e. A comparison of monitoring data to the discharge specifications, groundwater limitations, and explanation of any violation(s) of those requirements.

f. An evaluation of the groundwater quality beneath the wastewater treatment facility.

g. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to mean sea level datum.

h. Copies of laboratory analytical report(s) for groundwater monitoring.

2. The results from annual monitoring of the effluent and water supply.

3. The results of monitoring grease traps, septic tanks, and the treatment system.

4. If requested by staff, tabular and graphical summaries of all monitoring data collected during the year.

5. An evaluation of the performance of the wastewater treatment system and leachfield disposal system, as well as a forecast of the flows anticipated in the next year.

6. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.

7. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

A letter transmitting the self-monitoring reports shall accompany each report. The letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence

will be satisfactory. The transmittal letter shall contain the penalty of perjury statement by the Discharger, or the Discharger's authorized agent, as described in the Standard Provisions General Reporting Requirements Section B.3.

The Discharger shall implement the above monitoring program on the first day of the month following issuance of this Revised MRP.

Ordered by: Original signed by Frederick Moss for

PAMELA C. CREEDON, Executive Officer

16 August 2011
(Date)

LFU: 8/16/2011