June 13, 2017

Monitoring and Reporting Program
Order No. R1-2017-0025
for
Mr. Kenneth McCoy
Ms. Darlene McCoy
Assessor Parcel Number 008-040-06-00
Trinity County

This Monitoring and Reporting Program (MRP) describes requirements for monitoring groundwater from the drinking water well located on Assessor's Parcel Number 008-040-06-00. This MRP is issued pursuant to California Water Code section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer of the North Coast Regional Water Quality Control Board.

The time, date, and location of each grab sample shall be recorded on the sample container and chain-of-custody (COC) form. The sample shall be stored in a secure location to preclude contamination and must remain in the custody of the sampler/sample custodian until it is relinquished to another party and documented on the COC. Field test instruments (such as those used to measure pH and dissolved oxygen) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;

2. At a minimum, the instruments are field-calibrated at the manufacturer's recommended frequency;

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 this MRP.

Field sampling must be documented in the field at the time of analysis and documented in a bound logbook.

## STANDARD OPERATING PROCEDURES

The discharger shall submit a proposal of operating and sampling procedures that will be implemented to comply with this MRP. Upon approval of the Standard Operating Procedures (SOP) by the State or Regional Water Board staff, the Discharger shall conduct the monitoring event with 15 calendar days.

## GROUNDWATER MONITORING

Beginning with the second quarter 2017, the Discharger shall collect samples quarterly from the domestic well located on Trinity County Parcel 008-040-06-00 near Salyer, CA.

The Discharger shall continue collecting quarterly samples until the domestic well is sealed and this Order is rescinded.

This MRP requires bacterial sampling; the sampler shall ensure the sterility of all sampling equipment and all other equipment entering the well.

Prior to sampling or purging of a well, equilibrated groundwater elevations shall be measure to the nearest 0.01 foot from a reference point surveyed to the nearest 0.01 foot in elevation. Groundwater depth shall be measure in the well the same day. Prior to collection of a groundwater sample, each shall be purged at least three well volumes until pH, electrical conductivity, and turbidity have stabilized, and a sample representative of the water-bearing zone can be collected.

Sample collection shall follow standard United States Environmental Protection Agency (U.S. EPA) protocols. Specifically, during sample collection, the pump discharge line or bailer shall not contact the sample container. Due to the remote location of the Property, samples requiring preservation must be preserved at the time of sample collection. The sampler shall collect a field blank and a trip blank on the same day as the sample is collected.

Groundwater monitoring shall include, at a minimum, the following:

| **Constituent** | **Units** | **Sample Type** | **Notes** |
|---|---|---|---|
| Depth to Groundwater | 0.01 ft. | Measurement | |
| Groundwater Elevation | 0.01 ft. | Calculated | |
| pH | Std. units | Grab | Field measurement. |
| Total Coliform* | MPN/100 mL | Grab | 8 hour Maximum Holding Time |
| Total Dissolved Solids | mg/L | Grab | |
| Ammonia nitrogen+ | mg/L | Grab | |
| Total Kjeldahl Nitrogen+ | mg/L | Grab | |
| Caffeine | mg/L | Grab | |
| General Minerals[1] | mg/L | Grab | |

*The laboratory shall prepare a dilution series capable of achieving a detection level of 1.1 MPN/100 mL.

+ The discharger shall prepare a dilution series capable of achieving a detection level of 2 mg/L.

**PROVISIONS**

[1] Includes chloride, sulfate, bicarbonate, carbonate, calcium, iron, manganese, magnesium, nitrate as N, potassium, sodium, boron, and cation/anion balance. Nitrate as N shall utilize a dilution series capable of achieving a detection level of 2 mg/L.

1. Pollutants shall be analyzed using the analytical methods described in Title 40 of the Federal Code of Regulations (CFR) parts 136.3, 136.4, and 136.5; or, where no methods are specified for a given pollutant or where the method will not achieve the desired detection level, by methods approved by the Regional or State Water Board.

2. Laboratories analyzing water samples shall be certified by the State Water Board Environmental Laboratory Accreditation Program (ELAP) and must include quality assurance/quality control (QA/QC) data in the report. The laboratory must submit a copy of the laboratory certification with the report.

3. The monitoring report must affirm in writing that "all analyses were conducted at a laboratory certified for such analyses by the State Water Board and in accordance with current U.S. EPA guideline procedures or as specified in this MRP."

4. The monitoring report shall specify the analytical method used, the Method Detection Limit (MDL), the Reporting Level (RL), the date and time of analysis, the instrument, the name of the analyst, and the batch and sample IDs.

5. Analytical data shall be reported by one of the following methods:
    a. An actual numerical value for sample results greater than or equal to the RL; or
    b. "Detected, but Not Quantified (DNQ)" and the estimated numerical value if results are greater than or equal to the laboratory's MDL, but less than the RL; or
    c. "Not-Detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.
6. Samples must be analyzed within allowable holding time limits as specified in 136.3. All QA.QC items must be run on the same day and the sample were actually analyzed, and the results shall be reported and submitted with the laboratory reports.

7. The laboratory shall establish calibration standards so that the RL value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

8. Proper chain-of-custody (COC) procedures must be followed and a copy of the COC shall be submitted with the report. The COC must include the following:

    a. Sample Location
    b. Sample ID
    c. Sample Date and Sample Time
    d. Sample Type (Field Measurement, Grab, Composite, etc.)
    e. Matrix

f. Container Type and No. of Containers
g. The type of preservative, if used
h. The name of the person collecting the sample, printed and legible
i. Signature block for relinquishment: Relinquished by, Signature, Date and Time, Received by, Signature, Data and Time

9. The laboratory shall provide a Sample Receipt Form that includes the temperature and condition of the samples upon receipt, notes whether the COC was received and complete, and discusses any discrepancies.

**REPORTING**

The Discharger shall arrange the monitoring data in tabular form so that the date, sample type, and reported analytical result for each sample are readily discernible. The results of any monitoring done in excess of this MRP or more frequently than required by this MRP, shall be reported in the report.

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

The report shall include the following:

1. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities with field logs documenting depth to groundwater; parameters measured before, during and after purging; method of purging; calculation of casing volume; and total volume of water purged.

2. Calculation of groundwater elevation.

3. Results and documentation for all field parameters including meter calibration records.

4. Copies of the laboratory analytical reports for the monitoring event, including the QA/QC data signed under penalty of perjury along with chain-of-custody, sample receipt form, and ELAP certification.

Ordered By Shin-Roei Lee 2017.06.14 07:28:54 -07'00'

Water Boards

Shin-Roei Lee
Assistant Executive Officer