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MONITORING & REPORTING PROGRAM (MRP) R5-2023-0008



ORDER INFORMATION

Order Type(s): Monitoring & Reporting Program (MRP)
Status: ADOPTED
Program: Mines
Region 5 Office: Sacramento
Discharger(s): Homestake Mining Company of California
Facility: McLaughlin Mine
Address: 26775 Morgan Valley Road
County: Lake, Napa, Yolo Counties
Parcel Nos.: Waste Discharge Requirements Table 1
CIWQS Place ID: 240112
Geo Tracker ID: L10002904774
Prior Order(s): 5-01-168; R5-2012-0010; R5-2013-0030 & R5-2012-0010-01

CERTIFICATION

I, PATRICK PULUPA, Executive Officer, hereby certify that the following is a full, true, and correct copy of the order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 27 April 2023.

PATRICK PULUPA,
Executive Officer

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GLOSSARY

AMR	Annual Monitoring Report
CAMP	Corrective Action Monitoring Program
C.F.R.....	Code of Federal Regulations
CIWQS.....	California Integrated Water Quality System Project
COCs	Constituents of Concern
DMP	Detection Monitoring Program
DWR.....	California Department of Water Resources
EC	Electrical Conductivity
ELAP	State Water Board's Environmental Laboratory Accreditation Program (formerly administered by California Department of Public Health)
EMP	Evaluation Monitoring Program
GeoTracker	State Water Board's Data Management System for Sites with Potential Groundwater Impact
LCRS.....	Leachate Collection and Removal System
MDL.....	Method Detection Limit
MRP	Monitoring and Reporting Program
MU.....	Mining Waste Management Unit
N/A	Not Applicable
POC	Point of Compliance for Water Quality Protection Standard
QA/QC.....	Quality Assurance/Quality Control
Qualified Professional	Professional Civil Engineer or Geologist licensed by the State of California

RCRA	Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq.
RL.....	Reporting Limit
ROWD.....	Report of Waste Discharge
SCAP	Sample Collection and Analysis Plan
SI.....	Surface Impoundment
SMR	Semiannual Monitoring Report
SPRRs / Standard Provisions	Standard Provisions & Reporting Requirements for Waste Discharge Requirements for Discharges of Mining Wastes Regulated by Title 27, February 2009
TDS	Total Dissolved Solids
Title 27	California Code of Regulations, Title 27
USEPA.....	United States Environmental Protection Agency
WDRs.....	Waste Discharge Requirements
WQPS	Water Quality Protection Standard

UNITS

ft ³ / min	Cubic Feet per Minute
°F	Degrees Fahrenheit
Gallons/Day.....	Gallons per Day
mg/L	Milligrams per Liter
µg/L	Micrograms per Liter
µmhos/cm.....	Microsiemens per Centimeter
µg/cm ³	Micrograms per Cubic Centimeter

NTUsNephelometric Turbidity Units

% Vol.....Percent by Volume

Inches HgInches of Mercury (Barometric Pressure)

MM Hg VacuumMillimeters of Mercury (Barometric Pressure)

PREFACE

Adopted by the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) pursuant to Water Code section 13267, subdivision (b)(1), this Order establishes a Monitoring and Reporting Program (MRP) for Homestake Company of California (Discharger), which owns and/or operates the McLaughlin Mine (Facility) in Napa, Lake and Yolo Counties. Additional information regarding the Facility is set forth in the enumerated findings of Waste Discharge Requirements Order R5-2023-0008 (WDRs Order). Except as otherwise provided in the following MRP, these findings are incorporated herein.

The MRP also contains supplemental findings related to monitoring and reporting activities, and/or Facility conditions. For the purposes of California Code of Regulations, title 27 (Title 27) (e.g., §§ 21720, 20380-20435), the findings and provisions of this Order are conversely incorporated as part of the WDRs Order as well.

Although adopted with the WDRs Order, this is a separate order subject to subsequent revision by the Executive Officer in accordance with delegated authority per Water Code section 13223. For the purposes of Title 27, such revisions shall be automatically incorporated as part of the WDRs Order.

MONITORING & REPORTING PROGRAM

IT IS HEREBY ORDERED, pursuant to Water Code section 13267: that all previously issued Monitoring and Reporting Program(s) for the discharge of solid waste at the Facility are rescinded (except for enforcement purposes); and that the Discharger, their agents, employees and successors shall comply with the following Monitoring and Reporting Program (MRP). The Discharger shall not implement any changes until a revised MRP is issued by the Central Valley Water Board or its Executive Officer.

A. General Provisions

1. Incorporation of Standard Provisions

The Discharger shall comply with all relevant provisions of the Standard Provisions & Reporting Requirements for Waste Discharge Requirements for Discharges of Mining Wastes Regulated by Title 27, February 2009 (SPRRs or Standard Provisions), which are incorporated herein. See, e.g., SPRRs section IX (*Standard Monitoring Specifications*) and section X (*Response to Release*).

2. Monitoring Provisions in WDRs Order

The Discharger shall comply with all “Monitoring Provisions” in the Facility’s operative Title 27 WDRs Order, which are also incorporated herein.

3. Compliance with Title 27

The Discharger shall comply with all of Title 27 provisions as they pertain to activities described in this MRP (including SPRRs).

4. Sample Collection and Analysis Plan (SCAP)

All samples shall be collected, preserved and transported in accordance with the approved Sample Collection and Analysis Plan (SCAP) and the Quality Assurance/Quality Control (QA/QC) standards specified therein. The Discharger may use alternative analytical test methods (including new USEPA-approved methods), provided that the alternative methods have method detection limits (MDLs) equal to or lower than the analytical methods specified in this MRP and are identified in the approved SCAP.

B. Detection Monitoring Program (DMP)

To detect a release at the earliest possible time (see Title 27, § 20420, subd. (b)), the Discharger shall implement a Detection Monitoring Program (DMP) for groundwater and surface water in accordance with the provisions of Title 27, particularly sections 20415 and 20420.

1. Groundwater

a. Required Network

The Facility’s groundwater monitoring well network consists of the wells listed in Table 1.¹ As of the date of this Order, the network meets the requirements of Title 27. (Title 27, § 20415, subd. (b).)

Table 1—Groundwater Monitoring Network

Well	Program	Monitored Unit	Point of Compliance (WQPS)
S-01	Detection	North Pit	No
S-02B	Detection	South Pit	Yes
S-10	Detection	North Pit	Yes
S-05	Detection	West WRF	No
S-06R	Detection	West WRF	Yes
N-01	Background	TIF	No
N-02A	Background	TIF	No
N-05	Background	TIF	No
N-08A	Detection	TIF	Yes

¹ Non-background monitoring wells at the Point of Compliance constitute “Monitoring Points” for purposes of the Water Quality Protection Standard (WQPS).

Well	Program	Monitored Unit	Point of Compliance (WQPS)
N-08B	Detection	TIF	Yes
N-08C	Detection	TIF	Yes
N-12	Detection	TIF	Yes

See Glossary for definitions of terms and abbreviations in table.

b. Sample Collection and Analysis

Groundwater samples shall be collected from each well and analyzed for Monitoring Parameters listed in **Table 2** (Physical Parameters) and **Table 3** (Constituent Parameters), in accordance with the specified schedule for each parameter. (Title 27, § 20420, subds. (e)-(f).)

Table 2—Groundwater Detection Monitoring, Physical Parameters

Physical Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Temperature	TEMP	°F	Semiannually	Semiannually
Electrical Conductivity	SC	µmhos/cm	Semiannually	Semiannually
pH	PH	pH Units	Semiannually	Semiannually

See Glossary for definitions of terms and abbreviations in table.

Table 3—Groundwater Detection Monitoring, Constituent Parameters

Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Total Alkalinity	ALK	mg/L	Semiannually	Semiannually
Total Hardness	HARD	mg / L (as CaCO ₃)	Semiannually	Semiannually
Total Dissolved Solids	TDS	mg/L	Semiannually	Semiannually

Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Sulfate	SO4	mg/L	Semiannually	Semiannually
Metals, dissolved (arsenic, boron, copper, lead, mercury, manganese, nickel and zinc)	(various)	µg/L	Semiannually	Semiannually
Total Cyanide (N series only)*	CN	µg/L	Semiannually	Semiannually

See Glossary for definitions of terms and abbreviations in table.

*Total Cyanide is not required to be analyzed at Mine Pit area and Waste Rock area wells (S-01, S-02B, S-05, S-06 and S-10).

c. Groundwater Conditions

Each quarter, the Discharger shall monitor the Groundwater Conditions specified in **Table 4**, with the result of such monitoring being reported semiannually per **Section D.1.²** (Title 27, § 20415, subd. (b)(1).)

**Table 4—Groundwater Detection Monitoring,
Groundwater Conditions**

Groundwater Condition	GeoTracker Code	Monitoring Freq.	Reporting Freq.
Elevation (Well-Specific)	ELEV	Quarterly	Semiannually
Gradient	(none)	Quarterly	Semiannually
Flow Rate	(none)	Quarterly	Semiannually

² To the extent feasible, this information shall be determined separately for: (1) the uppermost aquifer; (2) any zones of perched water; and (3) any additional zone of saturation monitored based upon water level elevations taken prior to the collection of the water quality data submitted in the report. (Title 27, § 20415, subd. (e)(15).)

2. Pit MIW and TIF Internal Pond

a. Required Network

The North and South Mine Pit MIW and the tailings impoundment internal pond samples shall be collected from the North and South Pit and TIF internal pond. All annual samples shall be sampled in the Spring Quarter (April – June).

b. Sample Collection and Analysis

Pit and internal pond samples shall be collected from sampling locations specified above and analyzed for Monitoring Parameters listed in **Table 5** (Physical Parameters) and **Table 6** (Constituent Parameters), in accordance with the specified schedule for each parameter. (Title 27, § 20420, subs. (e)-(f).)

Table 5—Pit MIW and TIF Internal Pond Monitoring, Physical Parameters

Physical Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Elevation	ELEV	Amsl	Monthly	Semiannually
Freeboard	none	Feet& tenths	Monthly	Semiannually
Temperature	TEMP	°C	Annually	Annually
Electrical Conductivity	SC	µmhos/cm	Annually	Annually
pH	PH	pH Units	Annually	Annually

Table 6— Pit MIW and TIF Internal Pond Monitoring, Constituent Parameters

Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Total Dissolved Solids	TDS	mg/L	Annually	Annually

Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Total Hardness	HARD	mg / L (as CaCO ₃)	Annually	Annually
Sulfate	SO4	mg/L	Annually	Annually
Metals, dissolved (arsenic, boron, chromium, copper, mercury, nickel)	(various)	µg/L	Annually	Annually
Total Cyanide (TIF Pond only)	CN	µg/L	Annually	Annually

3. Surface Water

Runoff from the Facility is collected in one or more sedimentation basins, which periodically flow to Hunting Creek, which may be affected by a release. (See Title 27, § 20415, subd. (c)(1).)

a. Required Network

The Facility’s surface water monitoring network consists of the monitoring points listed in **Table 7**. As of the date of this Order, the network meets the requirements of Title 27. (See § 20415, subd. (c).)

Table 7—Surface Water Detection Monitoring Network

Monitoring Point	Program or Function	Monitored Unit	Location / Notes
HC-5	Background	West WRF	East tributary to Hunting Creek (SE1/4 of Section 2, T11N, R5W)
HC-9	Detection	TIF	West tributary to Hunting Creek (south of the center of Section 28, T12N, R5W)
HC-10	Detection	West WRF	Main Hunting Creek channel below the concrete weir (NE ¼ of Section 11, T11N, R5W)

Monitoring Point	Program or Function	Monitored Unit	Location / Notes
KC-3	Detection	East WRF North and South Pit	On Knoxville Creek (NW ¼ of Section 7, T11N, R4W)

See Glossary for definitions of terms and abbreviations in table.

b. Sample Collection and Analysis

When surface water is present at monitoring points in **Table 7**, samples shall be collected from each monitoring point and analyzed for the Monitoring Parameters in **Table 8** (Physical Parameters) and **Table 9** (Constituent Parameters), in accordance with the specified schedule. (Title 27, § 20420, subds. (e)-(f).)

All surface water monitoring parameters shall be graphed to show historical trends at each sample location.

Table 8—Surface Water Detection Monitoring, Physical Parameters

Physical Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Flow (estimate)	FLOW	gpm	Semiannually	Semiannually
Temperature	TEMP	°C	Semiannually	Semiannually
Electrical Conductivity	SC	µmhos/cm	Semiannually	Semiannually
pH	PH	Std. Units	Semiannually	Semiannually

See Glossary for definitions of terms and abbreviations in table.

**Table 9—Surface Water Detection Monitoring,
Constituent Parameters**

Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Total Alkalinity	ALK	mg/L	Semiannual	Semiannual
Total Hardness	HARD (as CaCO ₃)	mg/L	Semiannual	Semiannual
Total Suspended Solids	TSS	mg/L	Semiannual	Semiannual
Total Dissolved Solids	TDS	mg/L	Semiannual	Semiannual
Sulfate	SO ₄	mg/L	Semiannual	Semiannual
Ammonia	NH ₃	mg/L	Semiannual	Semiannual
Metals, dissolved (arsenic, boron, chromium, copper, mercury, nickel, zinc)	(various)	µg/L	Semiannual	Semiannual
Total Cyanide (HC-9 and HC-10 only)	CN	µg/L	Annually	Annually

See Glossary for definitions of terms and abbreviations in table.

4. Spring and Seep Monitoring

The springs and seeps are located immediately down gradient, south and east of the mine pit lakes.

a. Required Network

Existing and any new springs and seeps immediately down gradient of the North and South Pits on the south and east sides shall be monitored to determine if the pits are discharging. Existing springs are: 1420BS, 1450BS, 1550KS, 1560KS, 1600SEEP, 1400KA(adit), 1550KA(adit), 1680DS, and 1590DS.

b. Sample Collection and Analysis

When flow is present at monitoring points described above, samples shall be collected from each monitoring point and analyzed for the

Monitoring Parameters in **Table 10** (Physical Parameters) and **Table 11** (Constituent Parameters), in accordance with the specified schedule. (Title 27, § 20420, subds. (e)-(f).)

Table 10—Spring and Seep Monitoring, Physical Parameters

Physical Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Visual inspection to identify new springs	none		Semiannual	Semiannual
Flow (estimate)	FLOW	gpm	Semiannual	Semiannual
Temperature	TEMP	°C	Semiannual	Semiannual
Electrical Conductivity	SC	µmhos/cm	Semiannual	Semiannual
pH	PH	Std. Units	Semiannual	Semiannual

See Glossary for definitions of terms and abbreviations in table.

Table 11—Spring and Seep Monitoring, Constituent Parameters

Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Total Alkalinity	ALK	mg/L	Semiannual	Semiannual
Total Hardness	HARD (as CaCO ₃)	mg/L	Semiannual	Semiannual
Total Dissolved Solids	TDS	mg/L	Semiannual	Semiannual
Sulfate	SO4	mg/L	Semiannual	Semiannual
Metals, dissolved (arsenic, boron, chromium, copper, manganese, mercury, nickel)	(various)	µg/L	Semiannual	Semiannual

See Glossary for definitions of terms and abbreviations in table.

5. Leachate and Pump-Back System Monitoring

a. Required Network

The Facility’s pumpback monitoring network consists of the sampling points at leachate/pump-back sumps S-11, S-12, S-13 and TRS.

b. Sample Collection and Analysis

Leachate and pump-back liquids shall be collected from each monitoring point listed above and analyzed for the Monitoring Parameters in **Table 12** (Physical Parameters) and **Table 13** (Constituent Parameters), in accordance with the specified schedule. (Title 27, § 20420, subds. (e)-(f).)

Table 12—Leachate and Pumpback Detection Monitoring, Physical Parameters

Physical Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Flow (estimate)	FLOW	gpm*	Monthly	Semiannually
Temperature	TEMP	°C	Annually	Annually
Electrical Conductivity	SC	µmhos/cm	Annually	Annually
pH	PH	Std. Units	Annually	Annually

See Glossary for definitions of terms and abbreviations in table.

* Gallons per minute or gallons per month, as appropriate

Table 13—Leachate and Pumpback Detection Monitoring, Constituent Parameters

Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Total Alkalinity	ALK	mg/L	Annually	Annually
Total Hardness	HARD (as CaCO ₃)	mg/L	Annually	Annually

Constituent Parameter	GeoTracker Code	Units	Sampling Freq.	Reporting Freq.
Total Dissolved Solids	TDS	mg/L	Annual	Annually
Sulfate	SO4	mg/L	Annually	Annually
Sodium	NA	mg/L	Annually	Annually
Metals, dissolved (arsenic, boron, copper, lead, manganese, mercury, nickel)	(various)	mg/L	Annually	Annually
Total Cyanide (TIF only)	CN	µg/L	Annually	Annually

See Glossary for definitions of terms and abbreviations in table.

6. Evaporation Pond Monitoring

a. Required Network

After the construction of evaporation ponds, the Discharger shall establish sampling points at discharge points to stormwater channels and incorporate these sampling points into this MRP program.

b. Sample Collection and Analysis

Evaporation flush liquids shall be collected in sampling points as specified above and analyzed for monitoring parameters specified in facility's General Industrial Stormwater Permit (Order 2014-0057-DWQ). The results of these analyses shall be reported annually as specified in D.2.

7. Summary of Water Quality Protection Standard (WQPS) Components

The Water Quality Protection Standard (WQPS) is the Title 27 analytical framework through which an individual WMU is monitored for releases and impacts to water quality, i.e., the Detection Monitoring Program (DMP). (See Title 27, § 20390, subd. (a).) As explained in further detail below, for the duration of the Compliance Period, the Monitoring Points situated at a MU's Point of Compliance are sampled and analyzed for Monitoring Parameters indicative of a release. If concentrations of

Constituents of Concern exceed Concentration Limits, the results are confirmed through Retesting Procedures.

a. Compliance Period

The “compliance period” is the minimum time for which a water quality monitoring will be required, i.e., equal to the sum of closure and post-closure period. (Title 27, § 20410.) The period restarts each time an Evaluation Monitoring Program (EMP) is initiated for a given MU. (Id., §§ 20410(a), 20415, 20425.) If a MU is in corrective action, the period continues until it is demonstrated that the MU has been in continuous compliance with its WQPS for at least three years. (Id., § 20410, subd. (c).)

b. Monitoring Points

For WQPS purposes, a “monitoring point” is any well, device, or location where monitoring is conducted, and is specified in the Facility’s WDRs and subject to the WQPS. (Title 27, § 20164.) Monitoring Points are listed in **Section 1** (Detection Monitoring Program)—specifically **Table 1** (Groundwater).

c. Point of Compliance (POC)

The Point of Compliance (POC) is a vertical plane at the WMU’s hydraulically downgradient limit, extending through the uppermost underlying aquifer. (Title 27, §§ 10164, 20405(a).) The Facility’s POC groundwater monitoring wells are listed in **Table 1**.

d. Constituents of Concern (COCs)

Constituents of Concern (COCs) are waste constituents, reaction products, and hazardous constituents that are reasonably expected to be in or derived from waste contained in a MU (Title 27, §§ 20164, 20395.). The constituents of concern for the facility are pH, Total Dissolved Solids, hardness, total alkalinity, sulfate, arsenic, boron, total chromium, copper, lead, mercury, zinc, nickel and total cyanide.

e. Monitoring Parameters

Monitoring Parameters are a predetermined set of COCs and measurable physical characteristics (e.g., temp., electrical conductivity, pH), which serve as reliable indicators of a MU

release, and for which samples will therefore be routinely analyzed. (Title 27, §§ 20164, 20395(a), 20420(e)-(f).) For the purposes of this MRP, the Monitoring Parameters are:

- i. For **Groundwater**, those in **Table 2** and **Table 3**.
- ii. For **Surface Water**, those in **Table 8** and **Table 9**

f. Concentration Limits

The Concentration Limit for each COC is the “background concentration,” as determined by the statistical methods outlined in subdivision (e)(8) of Title 27, section 20415.³ (Title 27, § 20400, subds. (a), (b).) Methods for calculating Concentration Limits were proposed in the 1984 WQPS Report. The Maximum Likely Concentration or upper 1-tailed prediction interval limit at the 95% confidence limit is calculated for the next ten samples for wells, or the next five samples for springs.

Concentration Limits shall be proposed and/or updated by the Discharger on an annual basis, in the Annual Monitoring Report (AMR) submitted per **Section 0** here.

Unless expressly rejected by the Executive Officer in writing in 90 days from submission, these Concentration Limits shall be incorporated as part of this Order. Several notable Concentration Limits, as set forth in the *2021-2022 Annual Monitoring Report*, are provided below in **Table 14**. The concentrations in Table 12 are only a partial list of values provided for general information purposes only. These limits are to be superseded once updated values are submitted.

If the Discharger fails to submit periodically updated concentration limits, as provided in this MRP, the existing concentration limits shall remain operative, provided that, where appropriate, the

³ Concentration Limits are initially proposed by the discharger, then reviewed and approved by the Central Valley Water Board (subject to any necessary revisions). The limits specified herein are approved and incorporated as part of the Facility’s WDRs.

Executive Officer may revert to lower concentrations where warranted based on existing monitoring data.

Table 14—Notable Intrawell Concentration Limits for Groundwater Wells, January to June 2022 (WQPS)

Well	TDS (mg/L)	Hardness (mg/l)	Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Arsenic (µg/L)
S-01	2,774	1,563	430	318	2,402	401
S-02B	1,203	1,024	1,372	50	115	4,322
S-05	5,217	1,147	622	3,319	499	5
S-06R	4,464	3,357	652	82	2,576	6
S-10	8,416	298	2,243	3,426	187	118
N-01	1,442	569	477	38	299	0
N-02A	2,185	369	508	118	1,896	11
N-05	3,795	97	311	1,734	1,011	72
N-08A	4,650	747	110	2,711	456	7
N-08B	2,975	270	78	1,260	21	3
N-08C	1,343	180	124	840	231	2
N-12	985	752	748	30	113	1

See Glossary for definitions of terms and abbreviations in table.

g. Retesting Procedures

If monitoring results indicate measurably significant evidence of a release, as described in Section I.45 of the SPRRs (Standard Monitoring Specifications), the Discharger shall apply the following:

- iii. **Non-Statistical Retesting Procedures (SPRRs, § I.46)** for analytes detected in less than 10 percent of background samples (e.g., non-naturally occurring COCs); and

- iv. **Statistical Retesting Procedures (SPRRs, § 1.46)** for analytes detected in at least 10 percent of background samples (e.g., naturally occurring COCs).

C. Additional Facility Monitoring

1. Leachate and Pumpback Systems Monitoring

The Discharger shall operate and maintain leachate and pump back systems, and conduct monitoring of any detected leachate leaks in accordance with Title 27. All sumps shall be inspected monthly. As provided in **Table 12**, the flow rate for leachate in each sump shall be recorded after each inspection and reported semiannually per **Section D.1**.

2. Evaporation Pond Systems Monitoring

The Discharger shall operate and maintain evaporation ponds and conduct monitoring pond and associated infrastructure integrity in accordance with Title 27. All evaporation ponds and associated infrastructure shall be inspected monthly and reported semiannually. The volume of pit MIW transferred to the evaporation ponds shall be recorded monthly and reported annually per **Section D.2**.

3. Annual Facility Inspections

Prior to 30 September of each year, the Discharger shall inspect the Facility to assess repair and maintenance needs for drainage control systems, cover systems and groundwater monitoring wells; and preparedness for winter conditions (e.g., erosion and sedimentation control). If repairs are made as result of the annual inspection, problem areas shall be photographed before and after repairs. Any necessary construction, maintenance, or repairs shall be completed by **31 October**. See **Section D.4** for Reporting Requirements.

The inspection shall note damage to equipment or systems, (including wells, etc.), evaluate their continued ability to comply with Waste Discharge Requirements and shall include the Standard Observations contained in section XII.S of Standard Provisions and Reporting Requirements. Any necessary construction, maintenance, or repairs shall be completed by **31 October**. By **15 November** of each year, the Discharger shall submit an annual report describing the results of the inspection and the repair measures implemented,

including photographs of the problem and the repairs.

4. Major Storm Events

Within seven days of any major storm event (greater than 1 inch of rainfall in 24-hours)), the Discharger shall inspect the Facility for damage to any precipitation, diversion and drainage facilities, and all landfill side slopes. Necessary repairs shall be completed within 30 days of the inspection or as soon as ground conditions, weather, and contractor availability allow. The Discharger shall take photos of any problem areas before and after repairs. See **Section D.5** for Reporting Requirements.

D. Reporting Requirements

Table 15—Summary of Required Reports

Section	Report	Deadline
§ D.1	Semiannual Monitoring Reports (SMRs)	1 August (1 January to 30 June) 1 February (1 July to 31 December)
§ D.2	Annual Monitoring Reports (AMRs)	1 February
§ D.3	Leachate Seep Reporting	Immediately upon Discovery of Seepage (<i>staff notification</i>) Within 7 Days (<i>written report</i>)
§ D.4	Annual Facility Inspection Reports	15 November
§ D.5	Major Storm Reporting	Immediately after Damage Discovery (<i>staff notification</i>) Within 14 Days of Completing Repairs (<i>written report, photos</i>)
§ D.6	Financial Assurances Reports	30 April

Section	Report	Deadline
§ D.7	Water Quality Protection Standard Reports	Proposed Revisions (excluding Concentration Limits) – include in Annual Monitoring Report. <

1. Semiannual Monitoring Reports (SMRs)

The Discharger shall submit Semiannual Monitoring Reports (SMRs) on 1 August (1 Jan. to 30 June) and 1 February (1 July to 31 Dec.). SMRs shall contain the following materials and information:

- a. A statement affirming that all sampling activities referenced in the report were conducted in accordance with the approved SCAP (see § A.4).
- b. Map(s)/aerial photograph(s) depicting locations of all observation stations, monitoring points referenced in the report.
- c. In tabulated format, all monitoring data required to be reported on a semiannual basis, including Groundwater Conditions and Monitoring Parameters. (See **Section D.8.b** for additional requirements.)
- d. For each groundwater monitoring point referenced in the SMR:
 - i. The times each water level measurement was taken;
 - ii. The type of pump or other device used to purge and elevate pump intake level relative to screening interval;
 - iii. The purging methods used to stabilize water in the well bore before sampling (including pumping rate);
 - iv. The equipment and methods used for monitoring pH, temperature and electrical conductivity (EC) during purging activity, and the results of such monitoring;
 - v. Methods for disposing of purged water; and
 - vi. The type of device used for sampling, if different than the one used for purging.

- e. Evaluation of concentrations for all Constituent Parameters, comparison to current Concentration Limits, and results of any Retesting Procedures per **Section B.6.g**.
- f. In the event of a verified exceedance of Concentration Limit(s), any actions taken per Section J of the SPRRs (*Response to Release*) for wells and/or constituents not already specifically addressed in Corrective Action Monitoring under this MRP.
- g. Evaluation as to effectiveness of existing leachate monitoring and control facilities, and runoff/run-on control facilities.
- h. Summaries of all Regular Visual Inspections conducted per **Section C3** during the reporting period.
- i. Laboratory results.

2. Annual Monitoring Reports (AMRs)

On 1 February of each year,⁴ the Discharger shall submit an Annual Monitoring Report (AMR) containing following materials and information:

- a. In tabulated format, all monitoring data for which annual reporting is required under this MRP. (See **Section D.2.b** for additional requirements for monitoring reports.)
- b. Graphs of historical trends for all Monitoring Parameters.⁵
- c. All historical monitoring data for which there are detectable results, including data for the previous year, shall be submitted in tabular form in a digital file.

⁴ The Annual Monitoring Report may be combined with the Semiannual Monitoring Report for 1 July through 31 December of the same year, provided that the combination is clearly indicated in the title.

⁵ Each graph shall contain individual data points (not mean values) and be appropriately scaled to accurately depict statistically significant trends or variations in water quality.

- d. For each groundwater well, quarterly hydrographs showing the elevation of groundwater with respect to the top and bottom of the screened interval, and the elevation of the pump intake,
- e. A summary and discussion of the Facility's compliance record, and the result of any corrective actions taken or planned which may be needed to attain full compliance with the WDRs.
- f. A summary of the monitoring results, indicating any changes made or observed since the previous AMR.
- g. Annual updates to the Concentration Limits for all Monitoring Parameters and WQPS Monitoring Points, in accordance with **Section B.4.g** of this Order.
- h. Annual evaluation of South and North Pit and Internal Pond water quality trends.
- i. Sample Collection and Analyses Plan (Order Time Schedule I.3) for evaporation ponds and the results of monitoring of evaporation ponds.

3. Leachate Seep Reporting

Upon discovery of seepage from any disposal area within the Facility, the Discharger shall immediately notify the Central Valley Water Board via telephone or email; and within seven days, submit a written report with the following information:

- a. Map(s) depicting the location(s) of seepage;
- b. Estimated flow rate(s);
- c. A description of the nature of the discharge (e.g., all pertinent observations and analyses);
- d. Verification that samples have been submitted for analyses of the Monitoring Parameters in **Table 12** (*Physical Parameters*) and **Table 13** (*Constituent Parameters*), and an estimated date that the results will be submitted to the Central Valley Water Board; and
- e. Corrective measures underway or proposed, and corresponding time schedule.

4. Annual Facility Inspection Report

By 15 November, the Discharger shall submit a report with results of the Annual Facility Inspection per **Section C.3**. The report shall discuss any repair measures implemented, any preparations for winter, and include photographs of any problem areas and repairs.

5. Major Storm Events Reports

Immediately following each post-storm inspection described in **Section C.4**, the Discharger shall notify Central Valley Water Board staff of any damage or significant erosion (upon discovery). Subsequent repairs shall be reported to the Central Valley Water Board (together with before and after photos of the repaired areas) within 14 days of completion.

6. Financial Assurances Report

By **30 April** of each year, the Discharger shall submit a copy of the annual financial assurances report. (See WDRs Order.)

7. Water Quality Protection Standard Report

Any proposed changes⁶ to the Water Quality Protection Standard (WQPS) components (§ B.4), other than periodic update of the Concentration Limits (§ B.4.g), shall be submitted in a WQPS Report for review and approval. The report shall be certified by a “Qualified Professional” (§ B), and contain the following:

- a. *Potentially Affected Waterbodies*—An identification of all distinct bodies of surface water and groundwater potentially affected by a WMU release (including, but not limited to, the uppermost aquifer and any permanent or ephemeral zones of perched groundwater underlying the Facility);

⁶ If subsequent sampling of the background monitoring point(s) indicates significant water quality changes due to either seasonal fluctuations or other reasons unrelated to onsite waste management activities, the Discharger may request modification of the WQPS.

- b. *Map of Monitoring Points*—A map of all groundwater, surface water⁷ and unsaturated zone monitoring points (including all background/upgradient and Point of Compliance monitoring points);
- c. *Groundwater Movement*—An evaluation of perennial direction(s) of groundwater movement within the uppermost zone(s);
- d. *Statistical Method for Concentration Limits*—A proposed statistical method for calculating Concentration Limits for Monitoring Parameters detected in at least 10 percent of the background data (naturally-occurring constituents) using a statistical procedure from subdivisions (e)(8)(A)-(D) or (e)(8)(E) of Title 27, section 20415; and
- e. *Retesting Procedure*—A retesting procedure to confirm or deny measurably significant evidence of a release (Title 27, §§ 20415(e)(8)(E), 20420(j)(1)-(3)).

8. General Reporting Provisions

a. Transmittal Letters

Each report submitted under this MRP shall be accompanied by a Transmittal Letter providing a brief overview of the enclosed report, as well as the following:

- i. Any violations found since the last report was submitted, a description of all actions undertaken to correct the violation (referencing any previously submitted time schedules for compliance), and whether the violations were corrected; and
- ii. A statement from the submitting party, or its authorized agent, signed under penalty of perjury, certifying that, to the best of the signer's knowledge, the contents of the enclosed report are true, accurate and complete.

⁷ To the extent that surface water monitoring is included in the Detection Monitoring Program.

b. Monitoring Data and Reports

i. Electronic Submission via GeoTracker

All reports with monitoring data (e.g., SMRs and AMRs) shall be submitted electronically via the State Water Board's [Geotracker Database](https://geotracker.waterboards.ca.gov) (<https://geotracker.waterboards.ca.gov>). After uploading a report, the Dischargers shall notify Central Valley Water Board staff via email at CentralVallySacramento@WaterBoards.ca.gov. The following information shall be included in the body of the email:

Attention:	Title 27 Permitting and Mining
Report Title:	[Title of Report]
GeoTracker Upload ID:	[Identification Number]
Facility Name:	McLaughlin Mine
County:	Lake County
CIWQS Place ID:	240112

ii. Data Presentation and Formatting

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. Additionally, data shall be summarized in a manner that clearly illustrates compliance/noncompliance with WDRs.

iii. Non-Detections / Reporting Limits

Unless the reporting limits (RL) are specified in the same table, non-detections and sub-RL concentrations shall be reported as "< [limit]" (e.g., "< 5 µg/L").

iv. Units

Absent specific justification, all monitoring data shall be reported in the units specified herein.

c. Compliance with SPRRs

All reports submitted under this MRP shall comply with applicable provisions of the SPRRs, including those in Section XI (Standard Conditions) and Section X (Response to Release).

d. Additional Requirements for Monitoring Reports

Every monitoring report submitted under this MRP (e.g., SMRs [§ D.1], AMRs [§ D.2]) shall include a discussion of relevant field and laboratory tests, and the results of all monitoring conducted at the site shall be reported to the Central Valley Water Board in accordance with the reporting schedule above for the calendar period in which samples were taken or observations made.

E. Record Retention Requirements

The Discharger shall maintain permanent records of all monitoring information, including without limitation: calibration and maintenance records; original strip chart recordings of continuous monitoring instrumentation; copies of all reports required by this MRP; and records of all data used to complete the application for WDRs. Such records shall be legible, and show the following for each sample:

1. Sample identification and the monitoring point or background monitoring point from which it was taken, along with the identity of the individual who obtained the sample;
2. Date, time and manner of sampling;
3. Date and time that analyses were started and completed, and the name of the personnel and laboratory performing each analysis;
4. A complete list of procedures used (including method of preserving the sample, and the identity and volumes of reagents used);
5. A calculation of results; and
6. The results of all analyses, as well as the MDL and PQL for each analysis (all peaks shall be reported).

ENFORCEMENT

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

ADMINISTRATIVE REVIEW

Any person aggrieved by this Central Valley Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et seq. To be timely, the petition must be received by the State Water Board by 5:00 pm on the 30th day after the date of this Order; if the 30th day falls on a Saturday, Sunday or state holiday, the petition must be received by the State Water Board by 5:00 pm on the next business day. The law and regulations applicable to filing petitions are available on the [State Water Board website](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) (http://www.waterboards.ca.gov/public_notices/petitions/water_quality). Copies will also be provided upon request