MONITORING AND REPORTING PROGRAM R5-2026-0814
ATTACHMENT 1

All monitoring wells and extraction wells with wellhead access ports shall be field-monitored for the Field Parameters listed in Table 1. Field monitoring data shall be included in the field sampling data sheets and does not need to also be tabulated in the monitoring report.

Table 1. Field Parameters

Field Parameter	Units	Method
Water Level (depth to water)	ft AMSL, to the nearest 0.01 ft	Measurement
Electrical Conductivity (EC)	µS/cm, to the nearest 50 µS/cm	Field Meter
Dissolved Oxygen (DO)	mg/L, to the nearest 0.2 mg/L	Field Meter
pH	std. units, to the nearest 0.1	Field Meter
Temperature	°F or °C, to the nearest 0.1 degree	Field Meter
Turbidity	NTU	Field Meter
Oxidation-reduction potential (ORP)	mV, to the nearest 10 mV	Field Meter

Table 2. Analytical Methods

Constituent	Analytical or measurement method	Units
DBCP (note 1)	DOHS, EPA 8260, EPA 504.1, or similar	µg/L
Sulfolane	EPA 8270E or similar	µg/L
TDS	Method 2540C, EPA 160.1, or similar	mg/L
Nitrate as N Sulfate Chloride	EPA 300	mg/L
MBBR nutrients: Total nitrogen	SM4500-N or similar	mg/L
MBBR nutrients: Total phosphorus	SM4500-PE, EPA 200.7, EPA 365, or similar	mg/L

Table 2 note:

1. As stated in WDR Order R5-2021-0011 Specification B.6, compliance with the effluent limit for DBCP (0.0017 µg/L) is demonstrated by no detection of DBCP when using a PQL of 0.01 µg/L. If a method with a lower PQL is available, its use is recommended.

For Tables 3, 4, and 5, a dash indicates no sampling required. Abbreviations are:

A - Annually: once every year, in the third quarter
B - Biennially: once every two years, in the third quarter of the sampling year.
M - Monthly: once every month
Q - Quarterly: once every calendar quarter
S - Semi-annually: twice per year, once each in the first and third calendar quarters

Table 3. Treatment System Monitoring Parameters and Frequency

Location ID (note 1)	**DBCP**	**Sulfolane**	**TDS**	**Nitrate as N**	**Total N** and **Total P**	**Cumulative monthly flow**
GETS influent (point 1)	M	M	-	-	-	-
GETS effluent (point 3)	M	M	Q	Q	-	continuous (note 2)
MBBR influent (point 4)	M	M	-	-	M (note 3)	-
MBBR effluent (point 5)	M	M	Q	Q	M (note 3)	continuous (note 2)

Table 3 notes:

1. Monitoring point numbering is consistent with the numbering in the original MRP R5-2021-0011.
2. Total volume injected (gpd), injection flow rate (gpm), and injection pressure (psi) will be monitored continuously via instrumentation, with readings taken monthly.
3. Monitored only when nutrients are added.

Table 4. Extraction Well Sampling Locations, Analytes, and Frequencies

Location ID	DBCP	Sulfolane
EW-01	A	A
EW-02	A	A
EW-05	A	A
EW-06	A	A
EW-08A	A	A
EW-08B	A	A
EW-09	-	A
EW-10	A	A
EW-11	A	A
EW-12A	A	A
EW-12B	A	A
EW-13	A	A
EW-14A	A	A
EW-14B	A	A
EW-15A	A	A
EW-15B	A	A
EW-17	A	A
EW-18A	-	A
EW-18B	-	A
EW-19	-	A
New extraction wells	A	A

Table 5. Monitoring Well Sampling Locations, Analytes, and Frequencies (note 1)

Location ID (note 2)	**DBCP**	**Sulfolane**	**TDS**	**Nitrate as N**	**Sulfate**	**Chloride**
Water Table Zone wells						
PW28-040	-	S	A	A	A	A
PW31-030	-	S	A	A	A	A
New Water Table Zone wells	A	S	-	-	-	-
Shallow Zone wells						
PW09-080	-	A	A	A	A	A
PW10-084	-	A	A	A	A	A
PW12-078	-	A	A	A	A	A
PW22-071	-	A	A	A	A	A
PW26-086	A	A	A	A	A	A
PW30-080	-	S	A	A	A	A
PW31-080	-	S	A	A	A	A
WS-1-1	A	A	A	A	A	A
WS-1-2	A	A	A	A	A	A
New Shallow Zone wells	A	S	-	-	-	-
Intermediate Zone wells						
PW01-129	-	S	A	A	A	A
PW03-142	-	A	A	A	A	A
PW06-149	-	A	A	A	A	A
PW07-101	-	A	A	A	A	A
PW09-123	-	A	A	A	A	A
PW10-147	-	A	A	A	A	A
PW12-139	-	A	A	A	A	A
PW26-154	A	S	A	A	A	A
PW30-130	-	S	A	A	A	A
PW31-130	-	A	A	A	A	A

Location ID (note 2)	**DBCP**	**Sulfolane**	**TDS**	**Nitrate as N**	**Sulfate**	**Chloride**
WS-1-3	A	A	A	A	A	A
WS-1-4	A	A	A	A	A	A
New Intermediate Zone wells	A	S	-	-	-	-
Deep Zone wells (above the Corcoran Clay)						
PW01-180	-	S	A	A	A	A
PW01-236	-	S	A	A	A	A
PW03-218	-	A	A	A	A	A
PW06-197	-	A	A	A	A	A
PW07-203	A	A	A	A	A	A
PW09-198	-	A	A	A	A	A
PW12-193	-	A	A	A	A	A
PW18-199	A	A	A	A	A	A
PW22-164	-	A	A	A	A	A
PW26-199	A	S	A	A	A	A
PW30-180	-	S	A	A	A	A
PW30-240	-	S	A	A	A	A
PW31-180	-	A	A	A	A	A
PW32-180	-	A	A	A	A	A
PW33-207	-	A	A	A	A	A
PW35-250	-	A	A	A	A	A
PW35-276	-	A	A	A	A	A
PW38-260	-	A	A	A	A	A
PW39-279	-	A	A	A	A	A
PW40-261	-	A	A	A	A	A
PW41-240	-	A	A	A	A	A
PW41-268	-	A	A	A	A	A
PW43-270	-	S	A	A	A	A

Location ID (note 2)	**DBCP**	**Sulfolane**	**TDS**	**Nitrate as N**	**Sulfate**	**Chloride**
PW45-271	-	A	A	A	A	A
WS-1-5	A	A	A	A	A	A
WS-1-6	A	A	A	A	A	A
New Deep Zone wells	A	S	-	-	-	-
Injection Zone wells (below Corcoran Clay)						
PW09-338	-	A	A	A	A	A
PW12-315	-	A	A	A	A	A
PW16-329	-	A	A	A	A	A
PW20-500	-	A	A	A	A	A
New Injection Zone wells	-	A	A	A	A	A

Table 5 notes:

1. From R5-2026-0814 Requirement B.1.e: If an analyte in a given monitoring well that is sampled semi-annually shows a stable or decreasing trend across four consecutive semi-annual monitoring events, the sampling frequency for that analyte at that well may be reduced to annual sampling, with Central Valley Water Board staff concurrence. If an analyte is not detected in a given monitoring well above the reporting limit for four consecutive routine sampling events, the analyte may be removed from the required sampling for that well, with Central Valley Water Board staff concurrence.
2. Groundwater monitoring wells are listed according to their respective groundwater zones. The monitoring well's depth is generally indicated by the last three digits of the Location ID.