

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

Fresno Office
1685 "E" Street
Fresno, CA 93706-2007

Sacramento Office (Main)
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114

Redding Office
364 Knollcrest Drive #205
Redding, CA 96002

[Regional Board Website](https://www.waterboards.ca.gov/centralvalley) (https://www.waterboards.ca.gov/centralvalley)

WASTE DISCHARGE REQUIREMENTS ORDER R5-2024-0065



ORDER INFORMATION

Order Type(s): Waste Discharge Requirements (WDRs)
Status: ADOPTED
Program: Non-15 Discharges to Land
Region 5 Office: Fresno
Discharger(s): Midway Peaking, LLC and PAO Investments, LLC
Facility: Midway Peaking
Address: 43627 W. Panoche Road, Firebaugh, CA
93622
County: Fresno County
Parcel Nos.: 027-060-82SU
CIWQS ID: 720036
Global ID: WDR100047041
Prior Order(s): R5-2009-0052

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 13 December 2024.

PATRICK PULUPA
Executive Officer

REGIONAL BOARD INFORMATION

Sacramento Office (Main)

Rancho Cordova, CA 95670-6114
11020 Sun Center Drive #200
Telephone: (916) 464-3291

Fresno Office

1685 "E" Street
Fresno, CA 93706-2007
Telephone: (559) 445-5116

Redding Office

364 Knollcrest Drive #205
Redding, CA 96002
Telephone: (530) 224-4845

[Regional Board Website](https://www.waterboards.ca.gov/centralvalley)

<https://www.waterboards.ca.gov/centralvalley>

TABLE OF CONTENTS

Glossary	iv
Findings	1
Introduction	1
Facility and Discharge Description	2
Site Specific Conditions	7
<i>Topography, Climate and Land Use</i>	7
<i>Groundwater and Subsurface Conditions</i>	8
Legal Authorities	10
Basin Plan Implementation	11
<i>Water Quality Objectives</i>	11
<i>Compliance with Antidegradation Policy</i>	12
California Environmental Quality Act	13
Other Regulatory Considerations	14
Scope of Order	15
Procedural Matters	15
Requirements	15
A. Discharge Prohibitions	15
B. Construction Specifications	16
C. Discharge Specifications	16
D. Groundwater Limitations	18
E. Monitoring Specifications	18
F. Other Provisions	18

Attachment A—Site Location Map	22
Attachment B—Facility Map	23
Attachment C—VICINITY Map	24
Standard Provisions & Reporting Requirements	25
A. General Provisions	25
B. General Reporting Requirements	27
C. Provisions for Monitoring	29
D. Standard Conditions for Facilities Subject to California Code of Regulations, Title 23, Division 3, Chapter 15 (Chapter 15)	30
E. Conditions Applicable to Discharge Facilities Exempted from Chapter 15 under Section 2511.....	31
Information Sheet	38

TABLE INDEX

Table 1—Source Water Constituent Concentrations.....3
Table 2—RO Reject Wastewater Constituent Concentrations.....4
Table 3—Evaporation/Percolation Pond Monitoring (2011 – 2023).....6
Table 4—Groundwater Monitoring Network.....9
Table 5—Groundwater Monitoring (2008 – 2023).....9

GLOSSARY

Antidegradation Policy	... <i>Statement of Policy with Respect to Maintaining High Quality Waters in California</i> , State Water Board Resolution 68-16
Basin Plan	..... Water Quality Control Plan for Tulare Lake Basin
bgs	..... Below Ground Surface
CEQA	..... California Environmental Quality Act, Public Resources Code section 21000 et seq.
EIR	..... Environmental Impact Report
FEMA	..... Federal Emergency Management Agency
µg/L	..... Micrograms per Liter
µmhos/cm	..... Micromhos per Centimeter
mg/L	..... Milligrams per Liter
msl	..... Mean Sea Level
MRP	..... Monitoring and Reporting Program
MW	..... Monitoring Well
MCL	..... Maximum Contaminant Level per Title 22
PG&E	..... Pacific Gas and Electric Company
ROWD	..... Report of Waste Discharge
RCRA	..... Resource Conservation and Recovery Act
Title 22	..... California Code of Regulations, Title 22
Title 23	..... California Code of Regulations, Title 23
Title 27	..... California Code of Regulations, Title 27
Unified Guidance	..... <i>Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance</i> (USEPA, 2009)
WDRs	..... Waste Discharge Requirements

WQO[s].....Water Quality Objective[s]

(findings begin on next page)

FINDINGS

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) hereby finds as follows:

Introduction

1. Midway Peaking, LLC owns and operates the Midway Peaking facility (Facility) located at 43627 West Panoche Road, Firebaugh, California 93622 and has a signed lease with the property owner, PAO Investments, LLC. Both Midway Peaking, LLC and PAO Investments, LLC are hereafter jointly referred to as the Dischargers. As the Facility's owner and operator, the Dischargers are responsible for compliance with the Waste Discharge Requirements (WDRs) prescribed in this Order.
2. The Facility is constructed on approximately 5.6 acres of land (Assessor Parcel Numbers 027-060-82SU) in the southwest quarter of Section 5, Township 15 South, Range 13 East, Mount Diablo Base and Meridian (MDB&M). The Facility's location is depicted on the Site Location Map in Attachment A.
3. The Facility was previously regulated under the Central Valley Water Board's Waste Discharge Requirements (WDRs) Order R5-2009-0052, as adopted on 24 April 2009. The Dischargers submitted a Report of Waste Discharge (ROWD), dated 17 November 2021, requesting revisions to their WDRs to authorize proposed operational changes (as further described below). This WDRs Order R5-2024-0065 modifies and replaces the previous Order, conditionally authorizing the proposed changes.
4. The following materials are attached to this Order and incorporated herein:
 - a. Attachment A—Site Location Map
 - b. Attachment B— Vicinity Map
 - c. Attachment C— Site Map
 - d. Standard Provisions and Reporting Requirements, dated 1 March 1991
 - e. Information Sheet
5. Also attached to this is Monitoring and Reporting Program Order R5-2024-00XX, which establishes a Monitoring and Reporting Program (MRP) for discharges regulated under the WDRs prescribed herein. Compliance with the MRP, and subsequent revisions thereto, is required under this WDRs Order.

Facility and Discharge Description

6. The Facility is a 120-megawatt natural gas-fired power plant with two natural gas-fired combustion turbine generators. The Facility is typically operated for generation of electricity for approximately 400 hours per year, though it is permitted by the California Energy Commission (CEC) to generate up to 4,000 hours per year. Auxiliary equipment includes inlet air foggers with evaporative coolers, a step-up transformer, a compressed-air system, control enclosures, an aqueous ammonia storage tank, a natural gas fuel system, a water treatment system, water storage tanks, a wastewater system (septic), a site drainage system, and an evaporation/percolation pond.
7. The volume of source water used at the Facility on an annual basis from 2011 to 2023 ranged from 0 to 1.6 million gallons per month. Monthly source water use during the 2023 calendar year averaged 164,000 gallons per month.
8. The Facility requires high-purity water for inlet air fogging and turbine combustion water injection for nitrous oxide control, so it uses a RO system to treat its source water prior to use. The current source water used for the RO system is reclaimed irrigation filter backwash water from irrigation system sand filters owned and operated by Maverick Ranch, LLC (formerly Baker Farming Company, LLC [Baker Farms]). Approximately 160 acre-feet of backwash water was produced annually by Baker Farms. The irrigation filter backwash source water is conveyed to the Facility by a three-inch diameter underground pipeline from a 30 acre-foot collection basin. The source water is treated at the Facility with sodium hypochlorite, a sand filter, and then a RO unit and a demineralizer process. The treatment system includes a 75,000-gallon RO storage tank and two 75,000-gallon demineralized water storage tanks. The Facility requires about 10.2 acre-feet of treated water annually for 400 hours of electric generation, and 102 acre-feet for 4,000 hours.
9. Wastewater generated at the Facility includes reject water from the RO system, backwash/rinse water from the normal maintenance of the RO multimedia filter and demineralizer unit, and drainage/overflow water from the RO/demineralized water storage tanks. This wastewater is conveyed via pipelines to four concrete catch basins. An underground pipeline conveys the wastewater from the catch basins into the currently unlined evaporation/percolation pond for disposal. The water treatment system and evaporation/percolation pond are shown in Attachment C.
10. The evaporation/percolation pond is designed to hold approximately 1.8 acre-feet of wastewater with two feet of freeboard. The bottom of the pond is at an elevation of 397 feet above mean sea level (msl) and the top is at an elevation of

403 feet msl. The sidewalls have side slopes of two horizontal to one vertical to discourage waterfowl nesting.

9. In the 2021 ROWD, the Dischargers proposed to use groundwater from an on-site well as an alternate water supply source for its RO system. As described in the CEC's 16 January 2008 *Final Commission Decision* on the Facility's Application for Certification (06-AFC-10), and as further described below, the proposed groundwater source contains higher saline concentrations than the currently used irrigation filter backwash water. To prevent potential water quality impacts that could result from the change in source water, the Dischargers have proposed to line the evaporation/percolation pond with a Western Environmental Liner Company AQUA 40 Coext Prefabricated geomembrane, a 40-mil Reinforced Polyethylene (RPE) liner. This Order authorizes the Dischargers' use of the groundwater as an alternative source water source only after the pond liner system has been installed.
10. The water quality characteristics of the irrigation filter backwash water (year 2011 to 2023) and from the onsite well (six sampling events) are summarized in **Table 1** below:

Table 1— Source Water Constituent Concentrations

Constituent	Units	Average Concentration (Filter Backwash)	Average Concentration (On-site Well)
Arsenic (As)	µg/L	3.46	6.1
Barium (Ba)	µg/L	32.5	10.6
Bicarbonate (as CaCO ₃)	mg/L	74.3	140
Boron (B)	mg/L	0.26	3.9
Calcium (Ca)	mg/L	21.6	283
Carbonate (as CaCO ₃)	mg/L	15.9	ND
Chloride (Cl)	mg/L	74.5	2527
Electrical Conductivity (EC)	µmhos/cm	521	4666
Fluoride (F)	mg/L	0.17	---

Constituent	Units	Average Concentration (Filter Backwash)	Average Concentration (On-site Well)
Iron (Fe)	mg/L	0.08	1846
Magnesium (Mg)	mg/L	11.8	253
Nitrate (NO ₃)	mg/L	6.41	---
Potassium (K)	mg/L	3.46	9.1
Selenium (Se)	µg/L	2.50	280
Silica (SiO ₂)	mg/L	14.3	---
Sodium (Na)	mg/L	62.0	515
Sulfate (SO ₄)	mg/L	57.1	2050
Total Dissolved Solids (TDS)	mg/L	295	3500

See Glossary for definitions of terms and abbreviations in table.

11. RO Reject wastewater quality data from monitoring performed from year 2011 to 2023 (filter backwash as a source) and the predicted wastewater quality if the on-site well is used as a source are shown in **Table 2** below:

Table 2— RO Reject Wastewater Constituent Concentrations

Constituent	Units	Average Concentration (Filter Backwash)	Predicted Concentration (Well)	Actual/Potential Numeric WQO Limit
Arsenic (As)	µg/L	4.28	18.5	10 ¹
Barium (Ba)	µg/L	88.9	30	1000 ¹
Bicarbonate (as CaCO ₃)	mg/L	167	687	---
Boron (B)	µg/L	270	9102	700 ²
Calcium (Ca)	mg/L	55.9	883	---
Carbonate (as CaCO ₃)	mg/L	< 3	15.4	---

Constituent	Units	Average Concentration (Filter Backwash)	Predicted Concentration (Well)	Actual/Potential Numeric WQO Limit
Chloride (Cl)	mg/L	169	5861	250 ⁴
Electrical Conductivity (EC)	µmhos/cm	1115	36950	900 ⁴
Fluoride (F)	mg/L	0.21	0	2 ¹
Iron (Fe)	mg/L	0.08	0	0.3 ³
Magnesium (Mg)	mg/L	30.5	789	0.05 ³
Nitrate (NO ₃)	mg/L	9.83	0	45 ¹
Potassium (K)	mg/L	7.57	25	---
Selenium (Se)	µg/L	3.31	860	50 ¹
Silica (SiO ₂)	mg/L	29.8	40.1	---
Sodium (Na)	mg/L	126	4385	69 ²
Sulfate (SO ₄)	mg/L	133	5957	250 ⁴
Total Dissolved Solids (TDS)	mg/L	663	18600	500 ⁴

¹ Primary Maximum Contaminant Level (MCL) – Cal. Code Regs., tit. 22, §64431.

² Ayers, R.S. and D.W. Westcot, *Water Quality for Agriculture*, Food and Agriculture Organization of the United Nations – Irrigation and Drainage Paper No. 29, Rev.1, Rome (1985) – (Potential numeric WQOs may be based on this source)

³ Secondary (MCL) – Cal. Code Regs., tit. 22, § 64449-A.

⁴ Recommended Secondary MCL – Cal. Code Regs., tit. 22, § 64449-B.

12. The Dischargers have proposed to install at least two evaporation units to increase the rates of evaporation to support an increase of the Facility’s potential operational hours to 5,000 hours per year.
13. The Dischargers perform quarterly monitoring of the evaporation/percolation pond. The water quality analyses are summarized in **Table 3** below.

Table 3 – Evaporation/Percolation Pond Monitoring (2011 – 2023)

Constituent	Units	Concentration Average	Range
Arsenic (As)	µg/L	4.1	2.0 – 9.10
Barium (Ba)	µg/L	45	5.1 – 120
Bicarbonate (as CaCO ₃)	mg/L	84	3.2 – 230
Boron (B)	mg/L	0.35	0.1 – 3.10
Calcium (Ca)	mg/L	27	3.4 – 66.0
Carbonate (as CaCO ₃)	mg/L	19	5.8 – 44.0
Chloride (Cl)	mg/L	96	6.6 – 260
Electrical Conductivity (EC)	µmhos/cm	630	73 – 1500
Fluoride (F)	mg/L	0.21	0.11 – 0.33
Iron (Fe)	mg/L	0.12	0.03 – 0.31
Magnesium (Mg)	mg/L	14	1.6 – 37
Nitrate (as NO ₃)	mg/L	5.4	1.0 – 34
Potassium (K)	mg/L	4.3	2.2 – 7.9
Selenium (Se)	µg/L	3.3	2.1 – 5.4
Silica (SiO ₂)	mg/L	16	2.5 – 56
Sodium (Na)	mg/L	76	8.7 – 230
Sulfate (SO ₄)	mg/L	67	6.6 – 430
Total Dissolved Solids (TDS)	mg/L	350	30 – 870

Site Specific Conditions

Topography, Climate and Land Use

14. The site topography is generally flat, sloping gently downward to the southeast. The ground surface elevation ranges approximately from 400 feet msl at the northwest corner of the site to 395 feet msl at the southeast corner of the site.
15. The Facility is located in the western San Joaquin Valley, which is part of California's Central Valley. The Facility is located southeast of Panoche Creek on the Panoche Creek alluvial fan. The Facility is situated on a thick section of Quaternary surficial sediments and older alluvium underlain by Tertiary sediments, Cretaceous marine deposits, and pre-Tertiary basement rocks.
16. Storm water from the Facility is retained onsite and collected in a subsurface storm drain system that discharges to an unlined onsite storm water retention basin. All stormwater is retained on-site.
17. The nearest natural surface water body is Panoche Creek, an ephemeral stream about 1.8 miles northwest of the Facility. The California Aqueduct is about 2.6 miles northeast of the Facility.
18. The Facility is on the Panoche Creek alluvial fan which slopes to the east-northeast at a gradient of about 30 feet per mile near the Facility. Surface soils consist of the Panoche Series which is comprised of about 98 percent clay loam and two percent sandy loam.
19. No active or potentially active faults are known to cross the Facility. The closest known active fault is the Ortigalita fault zone, located 19 miles west of the site. The next closest known active fault is the San Andreas fault located 28 miles west of the Facility.
20. According to National Oceanic and Atmospheric Administration (NOAA) Precipitation Frequency Atlas 14, Vol. 6, 100-year and 1,000-year, 24-hour rainfall events are estimated to result in 2.55 and 3.58 inches of precipitation, respectively.¹
21. Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, Community Panel No. 1975, dated 19 July 2001, shows the Facility is partially within the special flood hazard area (Zone A) subject to the 100-year flood. The

¹ Source: [NOAA Precipitation Frequency Data Server](https://hdsc.nws.noaa.gov/hdsc/pfds)
(<https://hdsc.nws.noaa.gov/hdsc/pfds>)

U.S. Department of Homeland Security Elevation Certificate states that the base flood elevation is 404 feet above mean sea level (msl). The Facility is surrounded by an engineered earthen berm extending at least one foot above the base flood elevation.

22. Land use in the vicinity of the Facility is primarily large-scale agricultural and some rural residential. The CalPeak Panoche and Wellhead Peaker electrical generation plants are immediately west and south of the Facility, respectively. Adjacent to and west of the CalPeak Panoche plant is the PG&E electrical substation. A short distance to the south and west of the substation is the Panoche Energy Center electrical generation plant.

Groundwater and Subsurface Conditions

23. The Facility is generally underlain by alluvium of the Panoche Creek fan consisting of interbedded, poorly to moderately sorted, gravel, sand, silt, and clay layers of varying thickness.
24. The Corcoran Clay divides the groundwater system into an upper semi-confined zone, and a lower confined zone with the vertical gradient between the two zones typically downward. The Corcoran Clay was encountered at a depth from 660 to 785 feet below ground surface (bgs) in a monitoring well boring at the Panoche Energy Center.
25. There are seven offsite groundwater wells within one-half ($\frac{1}{2}$) mile of the Facility. One United States Geological Survey (USGS) groundwater well monitors the lower confined zone and a second well monitors the upper semi-confined zone. At the Panoche Energy Center, two groundwater wells monitor the lower confined zone and a third well monitors the upper semi-confined zone. At the CalPeak Panoche facility, an industrial supply well extracts groundwater from the upper semi-confined zone. An inoperable irrigation well is completed in the lower confined zone. Irrigation wells within two miles of the Facility are completed in the lower confined zone.
26. The Facility's groundwater monitoring network consists of monitoring well MW-1 (background) and monitoring MW-2 and MW-3 (downgradient). These three monitoring wells are identified in **Table 4**.

Table 4—Groundwater Monitoring Network

Monitoring Well	Depth
MW-1	220 feet
MW-2	220 feet
MW-3	220 feet

27. Groundwater monitoring data was compiled from the quarterly monitoring reports from 2008 to 2023. Constituent averages are summarized and assessed with the numeric water quality objectives (WQOs)/limits in **Table 5**.

Table 5—Groundwater Monitoring (2008 - 2023)

Constituent	Units	MW-1	MW-2	MW-3	Actual/Potential Numeric WQO Limit
Arsenic (As)	µg/L	14	13	12	10 ¹
Barium (Ba)	µg/L	11	11	10	1000 ¹
Bicarbonate (as CaCO ₃)	mg/L	97	87	86	---
Boron (B)	mg/L	3.0	3.2	4.3	0.7 ²
Calcium (Ca)	mg/L	569	603	613	---
Chloride (Cl)	mg/L	735	854	784	250 ⁴
Electrical Conductivity (EC)	µmhos/cm	6760	7270	7240	900 ⁴
Fluoride (F)	mg/L	0.30	0.42	0.34	2 ¹
Iron (Fe)	mg/L	0.30	--	0.13	0.3 ³
Magnesium (Mg)	mg/L	410	410	409	---
Nitrate (NO ₃)	mg/L	812	1060	883	45 ¹
Potassium (K)	mg/L	11	13	12	---
Selenium (Se)	µg/L	937	1080	1030	50 ¹
Silica (SiO ₂)	mg/L	45	45	45	---

Constituent	Units	MW-1	MW-2	MW-3	Actual/Potential Numeric WQO Limit
Sodium (Na)	mg/L	616	719	730	69 ²
Sulfate (SO ₄)	mg/L	2590	2620	2840	250 ⁴
Total Dissolved Solids (TDS)	mg/L	5580	5670	5880	500 ⁴

¹ Primary Maximum Contaminant Level (MCL) – Cal. Code Regs., tit. 22, § 64431.

² Ayers, R.S. and D.W. Westcot, *Water Quality for Agriculture*, Food and Agriculture Organization of the United Nations – Irrigation and Drainage Paper No. 29, Rev.1, Rome (1985) – (Potential numeric WQOs may be based on this source).

³ Secondary MCL – Cal. Code Regs., tit. 22, § 64449-A.

⁴ Recommended Secondary MCL – Cal. Code Regs., tit. 22, § 64449-B.

28. Upgradient well MW-1 is considered representative of background water quality. As shown in Table 5, background groundwater concentrations of arsenic, chloride, electrical conductivity, nitrate, selenium, sulfate, total dissolved solids, boron, iron, and sodium exceed their respective actual or potential WQOs.

Legal Authorities

29. This Order is adopted pursuant to Water Code section 13263, subdivision (a), which provides in pertinent part as follows:

The regional board, after any necessary hearing, shall prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge..., with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed. The requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241.

30. Compliance with section 13263, subdivision (a), including implementation of applicable water quality control plans, is discussed in the findings below.
31. The ability to discharge waste is a privilege, not a right, and adoption of this Order shall not be construed as creating a vested right to continue discharging waste. (Wat. Code, § 13263, subd. (g).)

32. This Order and its associated MRP are also adopted pursuant to Water Code section 13267, subdivision (b)(1), which provides as follows:

[T]he regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste ... shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports.

33. The reports required under this Order, as well as under the separately issued MRP, are necessary to verify and ensure compliance with WDRs. The burden associated with such reports is reasonable relative to the need for their submission.

Basin Plan Implementation

Water Quality Objectives

34. Pursuant to Water Code section 13263, subdivision (a), WDRs must “implement any relevant water quality control plans..., and shall take into consideration the beneficial uses to be protected, the WQOs reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241.”
35. This Order implements the Central Valley Water Board’s Water Quality Control Plan for the Tulare Lake Basin (Basin Plan), which designates beneficial uses for surface water and groundwater and establishes WQOs necessary to preserve such beneficial uses. (See Water. Code. §13241 et seq.)
36. The Facility is in the Westside Basin Hydrologic Unit, Detailed Analysis Unit (DAU) No. 244. The Basin Plan designates groundwater beneficial uses in this DAU as domestic supply (MUN), agricultural supply (AGR), and industrial service supply (IND).
37. The Facility is in the South Valley Floor Hydrologic Unit, Westlands Hydrologic Area No. 551.10. The Basin Plan designates surface water beneficial uses in this area as agricultural supply (AGR), industrial service supply (IND), industrial process supply (PRO), water contact recreation (REC-1), non-contact water

creation (REC-2), warm freshwater habitat (WARM), wildlife habitat (WILD), rare, threatened, or endangered species (RARE), and groundwater recharge (GWR).

38. The Basin Plan includes numeric WQOs for chemical constituents and, at a minimum, requires waters designated as MUN to meet the maximum contaminant levels (MCLs) specified in California Code of Regulations, title 22 (Title 22), division 4, chapter 15. The Central Valley Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.
39. The Basin Plan establishes narrative WQOs for chemical constituents, tastes and odors, and toxicity. The toxicity objective requires groundwater to be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life associated with designated beneficial uses. Quantifying a narrative WQO requires a site-specific evaluation of those constituents that have the potential to impact water quality and beneficial uses.

Compliance with Antidegradation Policy

40. The State Water Resources Control Board's (State Water Board) *Statement of Policy with Respect to Maintaining High Quality Waters in California*, Resolution 68-16 (Antidegradation Policy), which is incorporated as part of the Basin Plan, prohibits the Central Valley Water Board from authorizing degradation of "high quality waters" unless it is shown that such degradation: (1) will be consistent with the maximum benefit to the people of California; (2) will not unreasonably affect beneficial uses, or otherwise result in water quality less than as prescribed in applicable policies; and (3) is minimized through the dischargers' best practicable treatment or control (BPTC).
41. The receiving water is high quality with respect to barium and fluoride; it is not high quality with respect to the remainder of constituents present in the Facility's discharge. This Order re-authorizes the Facility's ongoing discharge to the unlined evaporation/percolation pond, which will result in continued loading of limited amounts of barium and fluoride to groundwater until the pond liner is installed and operational. In accordance with the Antidegradation Policy, this Order requires the Discharger to implement measures identified by the Central Valley Water Board as the best practicable treatment or control (BPTC) necessary to assure that pollution or nuisance will not occur and the highest water quality consistent with the maximum benefit to the people of the state will be maintained. In particular, this Order requires the following, which constitute BPTC:

- a. Installation of an impervious liner in the evaporation/percolation pond prior to use of the on-site groundwater for source water.
- b. Compliance with Groundwater Limitations.
- c. Ongoing monitoring and reporting.

Compliance with these and other requirements of this Order will assure that pollution and nuisance do not occur and that the highest water quality consistent with the maximum benefit to the people of the state will be maintained. The increases in fluoride and barium concentrations in groundwater that result from the regulated discharge are, and will continue to be, de minimis. After the pond is lined, the discharge regulated by this Order will no longer percolate to groundwater and, thus, loading of barium and fluoride will cease. The Board's authorization of the limited ongoing discharges from the Facility to underlying groundwater is in the maximum benefit to the people of the state because it promotes power grid flexibility while mitigating potential environmental impacts to the extent practicable.

California Environmental Quality Act

42. The California Environmental Quality Act (CEQA) (Pub. Res. Code, § 21000 et seq.) contains an exemption for certain regulatory programs of state agencies that have been certified as meeting criteria for conducting environmental reviews independent of CEQA's documentation requirements. Certified regulatory programs may act as lead agency for a project, and other agencies with permitting authority for the project acting as responsible agencies must use the environmental impact report (EIR) substitute prepared by the certified program when certain conditions are met. (See Cal. Code Regs., tit. 14, § 15253.)
43. The CEC's power plant site certification program is a certified regulatory program. (See Pub. Res. Code, §§ 25500-25543; Cal. Code Regs., tit. 14, § 15251, subd. (j).) On 16 January 2008, the CEC, acting as lead agency, approved the *Application for Certification* (06-AFC-10) for the Facility, which constitutes its EIR substitute. (*Ibid.*)
44. The Central Valley Water Board, acting as a responsible agency, is required to rely upon the CEC's EIR substitute if it meets the conditions listed in California Code of Regulations, title 14, section 15253, subdivision (b). The Board previously reviewed the CEC's EIR substitute for the Facility and determined that all conditions listed in section 15253, subdivision (b), were satisfied. (See WDRs Order R5-2009-0052, Findings 44-47.) The Board has determined that the activities authorized by this Order were sufficiently evaluated in the CEC's EIR

substitute and, therefore, the requirements of CEQA have been satisfied with respect to this Order.

Other Regulatory Considerations

45. Pursuant to Water Code section 106.3, subdivision (a), it is “the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.” Although this Order is not subject to Water Code section 106.3, as it does not revise, adopt or establish a policy, regulation, or grant criterion (see § 106.3, subd. (b)), it nevertheless promotes the policy by requiring discharges to meet MCLs for drinking water, which are designed to protect human health and ensure that water is safe for domestic use.
46. For the purposes of California Code of Regulations, title 23, section 2200, the Facility has a threat-complexity rating of 3-B, where:
 - f. Threat Category “3” reflects waste discharges that could either degrade water quality without violating WQOs or cause beneficial use impairments that are minor relative to Categories 1 and 2.
 - g. Complexity Category “B” reflects any discharger not included in Category A, with either (1) physical, chemical, or biological treatment systems (except for septic systems with subsurface disposal), or (2) any Class II or Class III WMUs.
47. This Order, which prescribes WDRs for discharges of wastewater, is exempt from the prescriptive requirements of California Code of Regulations, title 27, section 20005 et seq. (See Cal. Code Regs., tit. 27, § 20090, subd. (b).)
48. This Order does regulate offsite discharges of stormwater or any other discharges that are subject to federal Clean Water Act National Pollution Discharge Elimination System (NPDES) permitting requirements. All stormwater is retained on site; therefore, the Facility is not subject to stormwater permitting coverage.
49. The California Department of Water Resources sets standards for the construction and destruction of groundwater wells (hereafter DWR Well Standards), as described in California Well Standards Bulletin 74-90 (June 1991) and Water Well Standards: State of California Bulletin 74-81 (December 1981). These standards, and any more stringent standards adopted by the state or county pursuant to Water Code section 13801, apply to all monitoring wells used to monitor the impacts of wastewater storage or disposal governed by this Order.

Scope of Order

50. This Order is strictly limited in scope to those waste discharges, activities, and processes described and expressly authorized herein.
51. Pursuant to Water Code section 13264, subdivision (a), the Dischargers are prohibited from initiating the discharge of new wastes (i.e., other than those described herein), or making material changes to the character, volume and timing of waste discharges authorized herein, without filing a new ROWD per Water Code section 13260.
52. Failure to file a new ROWD before initiating material changes to the character, volume, or timing of discharges authorized herein shall constitute an independent violation of these WDRs.

Procedural Matters

53. The Dischargers, interested agencies, and other interested persons were notified of the Central Valley Water Board's intent to prescribe the WDRs in this Order, and provided an opportunity to submit their written views and recommendations at a public hearing. (Wat. Code, § 13167.5.)
54. At a public meeting, the Central Valley Water Board heard and considered all comments pertaining to the discharges regulated under this Order.
55. The Central Valley Water Board will review and revise the WDRs in this Order as necessary.

REQUIREMENTS

IT IS HEREBY ORDERED, pursuant to Water Code sections 13263 and 13267, that WDRs Order R5-2009-0052 is rescinded (except for enforcement purposes); and that the Dischargers and their agents, employees, and successors shall comply with the following:

A. Discharge Prohibitions

1. The discharge of waste to surface waters or surface water drainage courses is prohibited.
2. The discharge of waste classified as 'hazardous' (see Title 22, § 66261.1 et seq.) is prohibited.

3. Discharge of waste classified as 'designated' (Wat. Code, § 13173) in a manner that causes violation of the groundwater limitations in this Order is prohibited.
4. The discharge of waste at a location or in a manner different from that described in the Findings is prohibited.
5. The discharge of wastewater generated using the on-site well as a water supply source is prohibited until the Central Valley Water Board has provided its concurrence that the evaporation/percolation pond has been lined in a manner that precludes percolation of wastewater to underlying media.

B. Construction Specifications

To ensure that the construction and operation of the proposed liner in the evaporation/percolation pond will be unlikely to result in violations of this Order:

1. **At least 90 days prior to initiating construction of a liner**, the Dischargers shall submit design plans, technical specifications, and a Construction Quality Assurance Plan. Central Valley Water Board staff will review the submissions and provide either concurrence that the construction described in the submissions is likely to achieve continued compliance with this Order, or comments on how the construction plans could be modified to improve the likelihood of maintaining compliance.
2. The liner installed in the evaporation/percolation pond prior to discharge of wastewater produced using the on-site well for source water shall be at least as protective of underlying media as the Western Environmental Liner Company AQUA 40 Coext Prefabricated geomembrane that the Dischargers have proposed to install.
2. **Within 60 days after completion of construction** of the liner system, the Dischargers shall submit a post-construction certification report, including the results of a leak location survey.

C. Discharge Specifications

1. Prior to completion of construction of the liner system, discharges to the evaporation/percolation pond shall not have a pH less than 6.5 or greater than 9.0.
2. All conveyance, treatment, storage, and disposal systems shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

3. Objectionable odors shall not be perceivable beyond the limits of the property at an intensity that creates or threatens to create nuisance conditions.
4. The Dischargers shall operate and maintain the evaporation/percolation pond sufficiently to protect the integrity of the liner (after it has been installed) and to prevent overtopping and/or structural failure. The operating freeboard shall never be less than two feet (measured vertically from the lowest possible point of overflow). As a means of management and to discern compliance with this requirement, the Dischargers shall install and maintain a permanent staff gauge with calibration marks that clearly show the water level at design capacity and enable determination of available operational freeboard.
5. The evaporation/percolation pond shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary inflow and infiltration during the winter while ensuring compliance with all requirements of this Order. Design seasonal precipitation shall be based on total annual precipitation, using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
6. All discharge-related facilities shall be managed to prevent breeding of mosquitoes.
7. An erosion control program shall be implemented to ensure that small coves and irregularities are not created around the perimeter of the water surface of the evaporation/percolation pond.
8. Weeds in or around the evaporation/percolation pond shall be minimized through control of water depth, harvesting, or herbicides.
9. Dead algae, vegetation, and debris shall not accumulate on the water surface of the evaporation/percolation pond.
10. The Dischargers shall consult and coordinate with the local Mosquito Abatement District to minimize the potential for mosquito breeding as needed to supplement the above measures.
11. The Dischargers shall monitor solids accumulation in the evaporation/percolation pond annually and shall periodically remove the solids as necessary to maintain adequate storage capacity and in a way that protects the integrity of the liner, if the liner is present.

12. The Dischargers shall not allow pollutant-free wastewater to be discharged into the wastewater collection, treatment, and disposal systems in amounts that significantly diminish the system's capability to manage wastewater in compliance with this Order. Pollutant-free wastewater means rainfall, groundwater, cooling waters, and condensates that are essentially free of pollutants.

D. Groundwater Limitations

Release of waste constituents from any portion of the Facility shall not cause or contribute to groundwater containing constituent concentrations in excess of the concentrations specified below or in excess of background groundwater quality, whichever is greater:

1. The Primary or Secondary MCLs established in Title 22.
2. Contain taste or odor-producing constituents, toxic substances, or any other constituents in concentrations that cause nuisance or adversely affect beneficial uses.

E. Monitoring Specifications

1. The Dischargers shall comply with MRP R5-2024-0065 and any revisions thereto.

F. Other Provisions

1. In accordance with Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans for investigations and studies, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Dischargers shall bear the professional's signature and stamp.
2. The Dischargers shall submit the technical reports and work plans required by this Order for consideration by the Executive Officer and incorporate comments the Executive Officer may have in a timely manner, as appropriate. Unless expressly stated otherwise in this Order, the Dischargers shall proceed with all work required by the foregoing provisions by the due dates specified.

3. The Dischargers shall comply with the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*, dated 1 March 1991, (SPRRs) which are attached hereto and made part of this Order by reference.
4. The Dischargers shall comply with all conditions of this Order, including timely submittal of technical and monitoring reports. On or before each report due date, the Dischargers shall submit the specified document to the Central Valley Water Board or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, then the Dischargers shall state the reasons for such noncompliance and provide an estimate of the date when the Dischargers will be in compliance. The Dischargers shall notify the Central Valley Water Board in writing when it returns to compliance with the time schedule. Violations may result in enforcement action, including Central Valley Water Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.
5. The Dischargers shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Dischargers to achieve compliance with the conditions of this Order. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the Dischargers when the operation is necessary to achieve compliance with the conditions of this Order.
6. The Dischargers shall use the best practicable cost-effective control technique(s), including proper operation and maintenance, to comply with this Order.
7. At least 90 days prior to termination or expiration of any lease, contract, or agreement involving disposal, the Dischargers shall notify the Central Valley Water Board in writing of the situation and of what measures have been taken or are being taken to assure full compliance with this Order.
8. In the event of any change in control or ownership of the Facility, the Dischargers shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the Central Valley Water Board.

9. To assume operation as Discharger under this Order, any succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the name, address, and telephone number of the person(s) responsible for contact with the Central Valley Water Board, and a statement, in accordance with SPRRs Standard Provision B.3, that the new owner or operator assumes full responsibility for compliance with this Order. The Board will consider the proposed change in ownership and/or control and, if appropriate, will authorize the change during one of its regularly scheduled public meetings. Failure to submit the request prior to assuming ownership and/or control of Facility discharge(s) may result in enforcement action, including assessment of administrative civil liability (i.e., monetary penalties) for discharging without authorization in violation of the Water Code.
10. A copy of this Order, including the MRP, Information Sheet, Attachments, and SPRRs, shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.

ENFORCEMENT

If, in the opinion of the Executive Officer, the Dischargers fail 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.

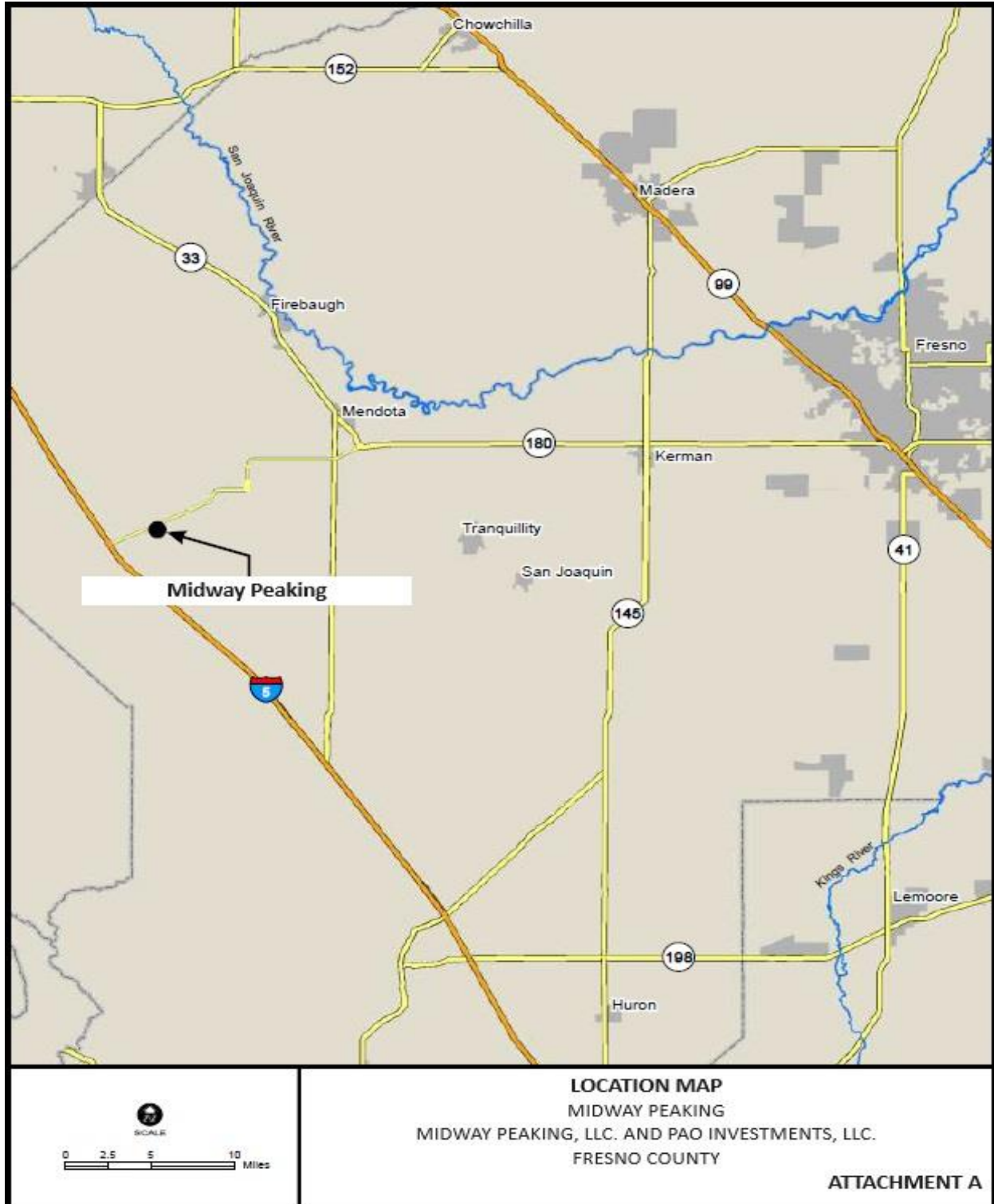
ADMINISTRATIVE REVIEW

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). Copies will also be provided upon request.

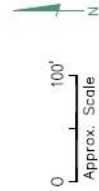
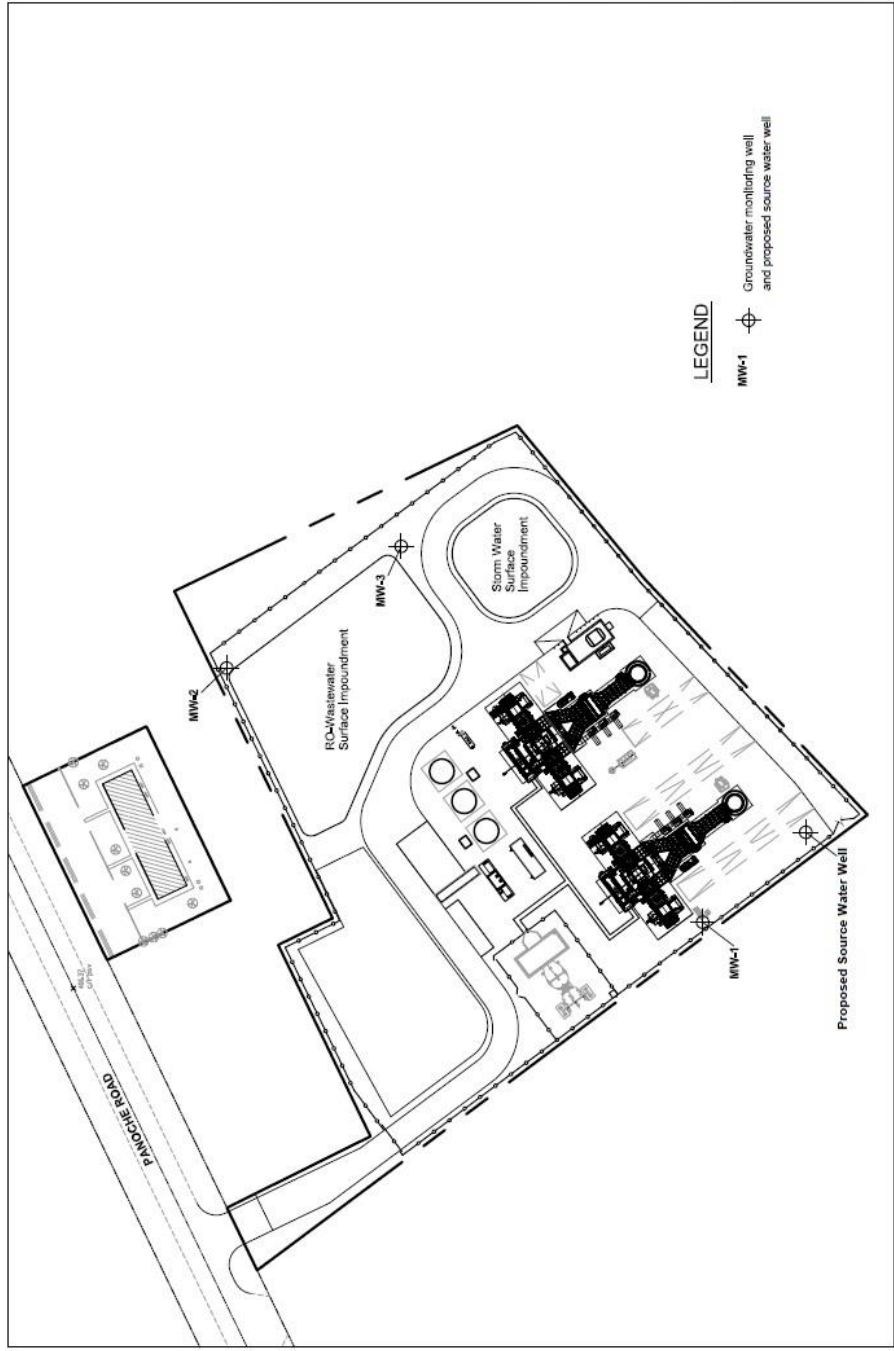
LIST OF ATTACHMENTS

Attachment A— Site Location Map
Attachment B— Vicinity Map
Attachment C— Facility Map
Standard Provisions and Reporting Requirements
Information Sheet
Monitoring and Reporting Program R5-2024-0065 (separate document)

ATTACHMENT A—SITE LOCATION MAP



ATTACHMENT B—FACILITY MAP



Note:
Figure adapted from Site Plan, dated 26 June 2008, prepared by Energy Services Inc.

ATTACHMENT C—VICINITY MAP



**STANDARD PROVISIONS & REPORTING REQUIREMENTS
FOR WASTE DISCHARGE REQUIREMENTS
1 MARCH 1991 EDITION**

A. General Provisions

1. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, or protect the Discharger from liabilities under federal, state, or local laws. This Order does not convey any property rights or exclusive privileges.
2. The provisions of this Order are severable. If any provision of this Order is held invalid, the remainder of this Order shall not be affected.
3. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - a. Violation of any term or condition contained in this Order;
 - b. Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;
 - c. A change in any condition that results in either a temporary or permanent need to reduce or eliminate the authorized discharge;
 - d. A material change in the character, location, or volume of discharge.
4. Before making a material change in the character, location, or volume of discharge, the discharger shall file a new Report of Waste Discharge with the Regional Board. A material change includes, but is not limited to, the following:
 - a. An increase in area or depth to be used for solid waste disposal beyond that specified in waste discharge requirements.
 - b. A significant change in disposal method, location or volume, e.g., change from land disposal to land treatment.
 - c. The addition of a major industrial, municipal or domestic waste discharge facility.
 - d. The addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or

STANDARD PROVISIONS & REPORTING REQUIREMENTS

product by an industrial facility resulting in a change in the character of the waste.

5. Except for material determined to be confidential in accordance with California law and regulations, all reports prepared in accordance with terms of this Order shall be available for public inspection at the offices of the Board. Data on waste discharges, water quality, geology, and hydrogeology shall not be considered confidential.
6. The discharger shall take all reasonable steps to minimize any adverse impact to the waters of the state resulting from noncompliance with this Order. Such steps shall include accelerated or additional monitoring as necessary to determine the nature and impact of the noncompliance.
7. The discharger shall maintain in good working order and operate as efficiently as possible any facility, control system, or monitoring device installed to achieve compliance with the waste discharge requirements.
8. The discharger shall permit representatives of the Regional Board (hereafter Board) and the State Water Resources Control Board, upon presentations of credentials, to:
 - a. Enter premises where wastes are treated, stored, or disposed of and facilities in which any records are kept,
 - b. Copy any records required to be kept under terms and conditions of this Order,
 - c. Inspect at reasonable hours, monitoring equipment required by this Order, and
 - d. Sample, photograph and video tape any discharge, waste, waste management unit, or monitoring device.
9. For any electrically operated equipment at the site, the failure of which would cause loss of control or containment of waste materials, or violation of this Order, the discharger shall employ safeguards to prevent loss of control over wastes. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures, or other means.
10. The fact that it would have been necessary to halt or reduce the permitted activity in Order to maintain compliance with this Order shall not be a defense for the discharger's violations of the Order.

STANDARD PROVISIONS & REPORTING REQUIREMENTS

11. Neither the treatment nor the discharge shall create a condition of nuisance or pollution as defined by the California Water Code, Section 13050.
12. The discharge shall remain within the designated disposal area at all times.

B. General Reporting Requirements

1. In the event the discharger does not comply or will be unable to comply with any prohibition or limitation of this Order for any reason, the discharger shall notify the Board by telephone at (916) 464-3291 [Note: Current phone numbers for all three Regional Board office may be found on the Central Valley Waterboards' (http://www.waterboards.ca.gov/centralvalley/about_us/contact_us)] as soon as it or its agents have knowledge of such noncompliance or potential for noncompliance, and shall confirm this notification in writing within two weeks. The written notification shall state the nature, time and cause of noncompliance, and shall include a timetable for corrective actions.
2. The discharger shall have a plan for preventing and controlling accidental discharges, and for minimizing the effect of such events. This plan shall:
 - a. Identify the possible sources of accidental loss or leakage of wastes from each waste management, treatment, or disposal facility.
 - b. Evaluate the effectiveness of present waste management/treatment units and operational procedures, and identify needed changes of contingency plans.
 - c. Predict the effectiveness of the proposed changes in waste management/treatment facilities and procedures and provide an implementation schedule containing interim and final dates when changes will be implemented.

The Board, after review of the plan, may establish conditions that it deems necessary to control leakages and minimize their effects.

3. All reports shall be signed by persons identified below:
 - a. For a corporation: by a principal executive officer of at least the level of senior vice-president.

STANDARD PROVISIONS & REPORTING REQUIREMENTS

- b. For a partnership or sole proprietorship: by a general partner or the proprietor.
- c. For a municipality, state, federal or other public agency: by either a principal executive officer or ranking elected or appointed official.
- d. A duly authorized representative of a person designated in 3a, 3b or 3c of this requirement if;
 - i. the authorization is made in writing by a person described in 3a, 3b or 3c of this provision;
 - ii. the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a waste management unit, superintendent, or position of equivalent responsibility²; and
 - iii. the written authorization is submitted to the Board

Any person signing a document under this Section shall make the following certification:

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 the 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.

- 4. Technical and monitoring reports specified in this Order are requested pursuant to Section 13267 of the Water Code. Failing to furnish the reports by the specified deadlines and falsifying information in the reports, are misdemeanors that may result in assessment of civil liabilities against the discharger.

² A duly authorized representative may thus be either a named individual or any individual occupying a named position.

STANDARD PROVISIONS & REPORTING REQUIREMENTS

5. The discharger shall mail a copy of each monitoring report and any other reports required by this Order to:

California Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

Note: Current addresses for all three Regional Board office may be found on the [Central Valley website](http://www.waterboards.ca.gov/centralvalley/about_us/contact_us) (http://www.waterboards.ca.gov/centralvalley/about_us/contact_us) or the current address if the office relocates.

C. Provisions for Monitoring

1. All analyses shall be made in accordance with the latest edition of: (1) Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater (EPA 600 Series) and (2) Test Methods for Evaluating Solid Waste (SW 846-latest edition). The test method may be modified subject to application and approval of alternate test procedures under the Code of Federal Regulations (40 CFR 136).
2. Chemical, bacteriological, and bioassay analysis shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. In the event a certified laboratory is not available to the discharger, analyses performed by a noncertified laboratory will be accepted, provided a Quality Assurance-Quality Control Program is instituted by the laboratory. A manual containing the steps followed in this program must be kept in the laboratory and shall be available for inspection by Board staff. The Quality Assurance-Quality Control Program must conform to EPA guidelines or to procedures approved by the Board. Unless otherwise specified, all metals shall be reported as Total Metals.
3. The discharger shall retain records of all monitoring information, including all calibration and maintenance records, all original strip chart recordings of continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of three years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer. Record of monitoring information shall include:

STANDARD PROVISIONS & REPORTING REQUIREMENTS

- a. the date, exact place, and time of sampling or measurements,
 - b. the individual(s) who performed the sampling of the measurements,
 - c. the date(s) analyses were performed,
 - d. the individual(s) who performed the analyses,
 - e. the laboratory which performed the analysis,
 - f. the analytical techniques or methods used, and
 - g. the results of such analyses.
4. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated at least yearly to ensure their continued accuracy.
 5. The discharger shall maintain a written sampling program sufficient to assure compliance with the terms of this Order. Anyone performing sampling on behalf of the discharger shall be familiar with the sampling plan.
 6. The discharger shall construct all monitoring wells to meet or exceed the standards stated in the State Department of Water Resources Bulletin 74-81 and subsequent revisions, and shall comply with the reporting provisions for wells required by Water Code Sections 13750 through 13755.22

D. Standard Conditions for Facilities Subject to California Code of Regulations, Title 23, Division 3, Chapter 15 (Chapter 15)

1. All classified waste management units shall be designed under the direct supervision of a California registered civil engineer or a California certified engineering geologist. Designs shall include a Construction Quality Assurance Plan, the purpose of which is to:
 - a. demonstrate that the waste management unit has been constructed according to the specifications and plans as approved by the Board.
 - b. provide quality control on the materials and construction practices used to construct the waste management unit and prevent the use

of inferior products and/or materials which do not meet the approved design plans or specifications.

2. Prior to the discharge of waste to any classified waste management unit, a California registered civil engineer or a California certified engineering geologist must certify that the waste management unit meets the construction or prescriptive standards and performance goals in Chapter 15, unless an engineered alternative has been approved by the Board. In the case of an engineered alternative, the registered civil engineer or a certified engineering geologist must certify that the waste management unit has been constructed in accordance with Board-approved plans and specifications.
3. Materials used to construct liners shall have appropriate physical and chemical properties to ensure containment of discharged wastes over the operating life, closure, and post-closure maintenance period of the waste management units.
4. Closure of each waste management unit shall be performed under the direct supervision of a California registered civil engineer or a California certified engineering geologist.

E. Conditions Applicable to Discharge Facilities Exempted from Chapter 15 under Section 2511

1. If the discharger's wastewater treatment plant is publicly owned or regulated by the Public Utilities Commission, it shall be supervised and operated by persons possessing certificates of appropriate grade according to California Code of Regulations, Title 23, Division 4, Chapter 14.
2. By-pass is prohibited. The Board may take enforcement action against the discharger for by-pass unless:
 - a. (1) By-pass was unavoidable to prevent loss of life, personal injury, or severe property damage,³ and (2) there were no feasible

³ Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a by-pass. Severe property damage does not mean economic loss caused by delays in production

STANDARD PROVISIONS & REPORTING REQUIREMENTS

alternatives to by-pass (e.g., use of auxiliary treatment facilities or retention of untreated waste)⁴; or

- b. (1) by-pass is required for essential maintenance to assure efficient operation, (2) neither effluent nor receiving water limitations are exceeded, and (3) the discharger notifies the Board ten days in advance.

The permittee shall submit notice of an unanticipated by-pass as required in paragraph B.1. above.

3. A discharger that wishes to establish the affirmative defense of an upset (see definition in E.6 below) in an action brought for noncompliance shall demonstrate, through properly signed, contemporaneous operating logs, or other evidence, that:
 - a. an upset occurred and the cause(s) can be identified;
 - b. the permitted facility was being properly operated at the time of the upset;
 - c. the discharger submitted notice of the upset as required in paragraph B.1. above; and
 - d. the discharger complied with any remedial measures required by waste discharge requirements.

In any enforcement proceeding, the discharger seeking to establish the occurrence of an upset has the burden of proof.

4. A discharger whose waste flow has been increasing, or is projected to increase, shall estimate when flows will reach hydraulic and treatment capacities of its treatment, collection, and disposal facilities. The projections shall be made in January, based on the last three years' average dry weather flows, peak wet weather flows and total annual flows, as appropriate. When any projection shows that capacity of any part of the

⁴ This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a by-pass that would otherwise occur during normal periods of equipment downtime or preventive maintenance.

STANDARD PROVISIONS & REPORTING REQUIREMENTS

facilities may be exceeded in four years, the discharger shall notify the Board by 31 January.

5. Effluent samples shall be taken downstream of the last addition of wastes to the treatment or discharge works where a representative sample may be obtained prior to disposal. Samples shall be collected at such a point and in such a manner to ensure a representative sample of the discharge.
6. Definitions
 - a. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper action.
 - b. The monthly average discharge is the total discharge by volume during a calendar month divided by the number of days in the month that the facility was discharging. This number is to be reported in gallons per day or million gallons per day. Where less than daily sampling is required by this Order, the monthly average shall be determined by the summation of all the measured discharges by the number of days during the month when the measurements were made.
 - c. The monthly average concentration is the arithmetic mean of measurements made during the month.
 - d. The “daily maximum” discharge is the total discharge by volume during any day.
 - e. The “daily maximum” concentration is the highest measurement made on any single discrete sample or composite sample.
 - f. A “grab” sample is any sample collected in less than 15 minutes.
 - g. Unless otherwise specified, a composite sample is a combination of individual samples collected over the specified sampling period;
 - i. at equal time intervals, with a maximum interval of one hour

STANDARD PROVISIONS & REPORTING REQUIREMENTS

- ii. at varying time intervals (average interval one hour or less) so that each sample represents an equal portion of the cumulative flow.

The duration of the sampling period shall be specified in the Monitoring and Reporting Program. The method of compositing shall be reported with the results.

7. Annual Pretreatment Report Requirements:

Applies to dischargers required to have a Pretreatment Program as stated in waste discharge requirements.)

The annual report shall be submitted by 28 February and include, but not be limited to, the following items:

- a. A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the influent and effluent for those pollutants EPA has identified under Section 307(a) of the Clean Water Act which are known or suspected to be discharged by industrial users.

The discharger is not required to sample and analyze for asbestos until EPA promulgates an applicable analytical technique under 40 CFR (Code of Federal Regulations) Part 136. Sludge shall be sampled during the same 24-hour period and analyzed for the same pollutants as the influent and effluent sampling analysis. The sludge analyzed shall be a composite sample of a minimum of 12 discrete samples taken at equal time intervals over the 24-hour period. Wastewater and sludge sampling and analysis shall be performed at least annually. The discharger shall also provide any influent, effluent or sludge monitoring data for nonpriority pollutants which may be causing or contributing to Interference, Pass Through or adversely impacting sludge quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto.

- b. A discussion of Upset, Interference, or Pass Through incidents, if any, at the treatment plant which the discharger knows or suspects were caused by industrial users of the system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken and, if known, the name and address of the industrial user(s) responsible. The discussion shall also include a review of

STANDARD PROVISIONS & REPORTING REQUIREMENTS

the applicable pollutant limitations to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent Pass Through, Interference, or noncompliance with sludge disposal requirements.

- c. The cumulative number of industrial users that the discharger has notified regarding Baseline Monitoring Reports and the cumulative number of industrial user responses.
- d. An updated list of the discharger's industrial users including their names and addresses, or a list of deletions and additions keyed to a previously submitted list. The discharger shall provide a brief explanation for each deletion. The list shall identify the industrial users subject to federal categorical standards by specifying which set(s) of standards are applicable. The list shall indicate which categorical industries, or specific pollutants from each industry, are subject to local limitations that are more stringent than the federal categorical standards. The discharger shall also list the noncategorical industrial users that are subject only to local discharge limitations. The discharger shall characterize the compliance status through the year of record of each industrial user by employing the following descriptions:
 - i. Complied with baseline monitoring report requirements (where applicable);
 - ii. Consistently achieved compliance;
 - iii. Inconsistently achieved compliance;
 - iv. Significantly violated applicable pretreatment requirements as defined by 40 CFR 403.8(f)(2)(vii);
 - v. Complied with schedule to achieve compliance (include the date final compliance is required);
 - vi. Did not achieve compliance and not on a compliance schedule;
 - vii. Compliance status unknown.

STANDARD PROVISIONS & REPORTING REQUIREMENTS

A report describing the compliance status of any industrial user characterized by the descriptions in items (d)(3) through (d)(7) above shall be submitted quarterly from the annual report date to EPA and the Board. The report shall identify the specific compliance status of each such industrial user. This quarterly reporting requirement shall commence upon issuance of this Order.

- e. A summary of the inspection and sampling activities conducted by the discharger during the past year to gather information and data regarding the industrial users. The summary shall include but not be limited to, a tabulation of categories of dischargers that were inspected and sampled; how many and how often; and incidents of noncompliance detected.
- f. A summary of the compliance and enforcement activities during the past year. The summary shall include the names and addresses of the industrial users affected by the following actions:
 - i. Warning letters or notices of violation regarding the industrial user's apparent noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the apparent violation concerned the federal categorical standards or local discharge limitations;
 - ii. Administrative Orders regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations;
 - iii. Civil actions regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations;
 - iv. Criminal actions regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations.

STANDARD PROVISIONS & REPORTING REQUIREMENTS

- v. Assessment of monetary penalties. For each industrial user identify the amount of the penalties;
 - vi. Restriction of flow to the treatment plant; or
 - vii. Disconnection from discharge to the treatment plant.
- g. A description of any significant changes in operating the pretreatment program which differ from the discharger's approved Pretreatment Program, including, but not limited to, changes concerning: the program's administrative structure; local industrial discharge limitations; monitoring program or monitoring frequencies; legal authority of enforcement policy; funding mechanisms; resource requirements; and staffing levels.
- h. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases.
- i. A summary of public participation activities to involve and inform the public.
- j. A description of any changes in sludge disposal methods and a discussion of any concerns not described elsewhere in the report.

Duplicate signed copies of these reports shall be submitted to the Board and:

Regional Administrator
U.S. Environmental Protection Agency
W-5 75 Hawthorne Street San Francisco, CA 94105

and

State Water Resource Control Board
Division of Water Quality
P.O. Box 100 Sacramento, CA 95812

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

WASTE DISCHARGE REQUIREMENTS ORDER R5-2024-0065
FOR
MIDWAY PEAKING, LLC & PAO INVESTMENTS, LLC
MIDWAY PEAKER PROJECT
FRESNO COUNTY

INFORMATION SHEET

Midway Peaking, LLC, owns and operates the Midway Peaking power electrical generation plant (Facility) and has a signed lease with the property owner, PAO Investments, LLC. Both Midway Peaking, LLC and PAO Investments, LLC are hereafter jointly referred to as Dischargers and are responsible for compliance with this Order. The Facility is located at 43627 West Panoche Road, Firebaugh, California 93622 in an unincorporated area of western Fresno County. The Facility is approximately 12 miles southwest of the City of Mendota and two miles northeast of the intersection of West Panoche Road and Interstate Highway 5. The Facility is constructed on approximately 5.6 acres of land (Assessor Parcel Numbers 027-060-82SU) in the southwest quarter of Section 5, Township 15 South, Range 13 East, Mount Diablo Base and Meridian (MDB&M).

The Facility is a peaking-power plant with an electrical output of 120 megawatts. The Facility includes a water treatment system consisting of a Reverse Osmosis (RO) system and currently discharges RO reject water into an unlined evaporation/percolation pond. The Dischargers submitted a Report of Waste Discharge (ROWD), dated 17 November 2021, to obtain revised WDRs allowing for the installation of a liner system and two evaporation units in its existing evaporation/percolation pond and to add an on-site well as an alternative water supply source for the Reverse Osmosis (RO) system. The Facility currently uses reclaimed irrigation filter backwash water from Maverick Ranch, LLC (formerly Baker Farming Company, LLC). The backwash water is conveyed to the Facility by an underground pipeline from a 30 acre-foot collection basin about 1.5 miles southeast of the Facility. About 160 acre-feet of backwash water is produced annually from the irrigation water. The Facility will require about 10.2 acre-feet of source water annually for 400 hours and 102 acre-feet annually for 4,000 hours of electric generation.

The Facility's water treatment system consists of a sand filter, a reverse osmosis (RO) treatment unit, a demineralizer unit, a RO water storage tank, and two demineralized water storage tanks. The RO reject water, backwash/rinse water from the maintenance of the RO multimedia filter and demineralizer unit, and drainage/overflow water from the RO/demineralized water storage tanks are discharged into the evaporation/percolation pond. The RO system supplier estimates an annual RO reject wastewater volume of 4.38 acre-feet for 400 hours and 43.8 acre-feet for 4,000 hours of electric generation. Wastewater is conveyed via pipes from the water treatment system to the evaporation/percolation pond for disposal by evaporation. The impoundment is designed to hold approximately 1.8 acre-feet of water with two feet of freeboard. This

Order requires the installation of a liner in the evaporation/percolation pond and allows for the use of an on-site well as a water supply source.

The Corcoran Clay divides the groundwater system into an upper semi-confined zone and a lower confined zone. The Corcoran Clay is at a depth of about 660 to 785 feet bgs in a monitoring well boring at the nearby Panoche Energy Center. Midway Peaking, LLC. (Formerly Starwood Power – Midway, LLC.) has installed three groundwater monitoring wells at the Facility to monitoring the upper zone at the water table. The upgradient well, MW-1, is about 330 feet southwest, and the downgradient wells, MW-2 and MW-3, are 10 to 15 feet east of the evaporation/percolation pond.