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STATE WATER RESOURCES
CONTROL BOARD
2014 JUL 31 PM 2:19
DIV OF WATER RIGHTS
SACRAMENTO

5 Counsel for Petitioner
6 VALLEY WATER MANAGEMENT COMPANY

7
8 BEFORE THE
9 CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

10)
11 In the Matter of the Petition by VALLEY) **PETITION FOR REVIEW;**
12 WATER MANAGEMENT COMPANY) **PRELIMINARY POINTS AND**
13 for Review of Action and Failure to Act by) **AUTHORITIES IN SUPPORT OF**
14 the California Regional Water Quality) **PETITION FOR REVIEW.**
15 Control Board, Central Valley Region, in)
16 issuing July 1, 2014 Water Code Section) **[WATER CODE § 13320]**
17 13267 Order.)
18)

16
17 In accordance with section 13320 of the Water Code, Petitioner VALLEY WATER
18 MANAGEMENT COMPANY ("Valley Water") hereby petitions the State Water Resources
19 Control Board ("State Water Board") to review the action and failure to act by the California
20 Regional Water Quality Control Board for the Central Valley Region ("Regional Board") in
21 issuing, via letter, a Water Code Directive pursuant to Water Code section 13267 ("13267 Order")
22 on 1 July 2014. A copy of the 13267 Order is attached hereto as Exhibit A. On 29 July 2014,
23 Valley Water submitted a Request for Extension to the Regional Board. A copy of the Request for
24 Extension is attached hereto as Exhibit B.

25 A summary of the basis for Valley Water's Petition for Review and a preliminary statement
26 of points and authorities are set forth in this Petition in accordance with Title 23, California Code
27 of Regulations, section 2050(a). Valley Water reserves the right, as necessary, to file supplemental
28

1 points and authorities in support of its Petition for Review once the administrative record becomes
2 available.¹

3 **1. NAME, ADDRESS, TELEPHONE NUMBER, AND EMAIL ADDRESS OF THE**
4 **PETITIONER:**

5 Valley Water currently owns and operates the Fee 34 Facility and the Race Track Hill Area
6 in the Edison Oil Field area in Kern County (together referred to as "Facilities"). The name and
7 address of the Petitioner is as follows:

8 Valley Water Management Company
9 c/o Mr. Larry Bright, Manager
7500 Meany Avenue
10 Bakersfield, California 93308
Telephone: (661) 410-7500
11 Fax: (661) 410-7506
Email: lbright@vwwater.com

12 However, all materials in connection with this Petition for Review should also be provided to
13 Valley Water's counsel at the following address:

14 Melissa A. Thorne
Downey Brand LLP
15 621 Capitol Mall, 18th Floor
Sacramento, California 95814
16 Telephone: (916) 520-5376
17 Email: mthorne@downeybrand.com

18 **2. THE SPECIFIC ACTION OF THE REGIONAL BOARD WHICH THE STATE**
19 **BOARD IS REQUESTED TO REVIEW:**

20 Valley Water seeks review of the action and failure to act of the Regional Board in
21 connection with the issuance of the 13267 Order. Specifically, the 13267 Order unreasonably
22 imposes a 15 January 2015 deadline for completing all investigations of the Facilities. In imposing
23 this deadline, the Regional Board failed to act in a manner required by Water Code section 13000,
24 as this deadline requires Valley Water to act under an infeasible and unreasonable timeframe and is

25 _____
26 ¹ The State Water Board's regulations require submission of a memorandum of points and authorities in support of a
27 petition, and this document is intended to serve as a preliminary memorandum. However, it is impossible to prepare a
28 thorough memorandum or a memorandum that is entirely useful to the reviewer in the absence of the complete
administrative record, which is not yet available. Moreover, to the extent that the Regional Board fails to grant Valley
Water's request for an extension filed on July 29th, Valley Water reserves the right to file a Request for Stay at a future
date to accompany this Petition for Review.

1 unnecessary in light of Valley Water’s ongoing voluntary ongoing investigations and proven
 2 cooperation with the Regional Board. Valley Water requests that the following sentence be
 3 removed from the 13267 Order (or at least modified to extend the date):

4 **“By 15 January, 2015, the investigations at both Facilities shall be completed and the final**
 5 **report submitted for review by the Assistant Executive Officer (or his/her delegate).”**

6 The above sentence is unnecessary and contrary to the previous provision, which states:

7 **“All activities in each Phased Work Plan shall be completed** in accordance with time
 8 frames included in each Phased Work Plan as approved by the Assistant Executive Officer
 (or his/her delegate).”

9 The final completion deadline should be in accordance with the approved Work Plans, not
 10 set to meet an arbitrary and impracticable deadline of January 15, 2015.

11 **3. THE DATE ON WHICH THE REGIONAL BOARD ACTED:**

12 The Regional Board issued the 13267 Order on July1, 2014.

13 **4. A FULL AND COMPLETE STATEMENT OF REASONS THE ACTION OR**
 14 **FAILURE TO ACT WAS INAPPROPRIATE OR IMPROPER:**

15 The 13267 Order provides for three phases of the Work Plan. Generally speaking, the first
 16 phased work plan (“Phase 1”) requires Valley Water to conduct investigations and studies to
 17 determine whether potential adverse impacts on soil and groundwater quality have occurred. The
 18 second phased work plan (“Phase 2”) requires Valley Water to continue determination of potential
 19 adverse impacts and also characterize and document the nature and extent of the releases, if any,
 20 from the subject facilities. The 13267 Order requires completion of both the Phase 2 site
 21 investigations and potential follow-on characterization investigations, followed by a report due by
 22 15 January 2015. Finally, under the third phased work plan (“Phase 3”), once the characterization
 23 is complete, Valley Water must conduct studies to evaluate what corrective measures, if any, are
 24 necessary to protect existing and potential future uses of impacted soils and groundwater. This
 25 Phase 3 work is also required to be submitted by January 15, 2015.

26 To complete Phase 2, Valley Water must receive comments from Regional Board staff;
 27 plan, schedule and conduct investigations; and submit a report on the fieldwork, data evaluation,
 28 and interpretation. Because Valley Water was to submit the Phase 1 report by 1 August 2014, and

1 Valley Water cannot undertake the Phase 2 field investigations until Phase 1 is complete, the 13267
2 Order unreasonably gives Valley Water only five and one half months to complete the
3 investigations and report required by the next phases. Given the amount of work to be completed
4 under Phase 2, and limited the time frame provided, the 15 January 2015 deadline for that Phase
5 alone is unreasonable and infeasible, and meeting both Phase 2 and 3 by that deadline is
6 impossible.

7 Valley Water has already accelerated the pace of the investigations at the Facilities by
8 voluntarily submitting a Phase 1 work plan, receiving Regional Board approval, conducting field
9 work, and analyzing the results. While this voluntary acceleration of the investigation gave Valley
10 Water slightly more time to complete the Phase 2 activities, the 15 January 2015 deadline remains
11 untenable for reasons beyond Valley Water's control. Namely, the preferred drilling company for
12 Phase 2 well installation and drilling has advised Valley Water there is at least a three-month lead
13 time from the date Valley Water retains their drilling services to the date drilling is initiated
14 because of the considerable backlog for drillers due to the on-going drought. Moreover, retaining
15 this company's services may require a substantial deposit that may not be refundable should Valley
16 Water later cancel the drilling program. In light of this lead time, Valley Water anticipates drilling
17 operations will commence at the earliest in October, and possibly not until November particularly
18 if the drought continues unabated. The drilling, well construction, development, sampling, and
19 water quality analysis required by Phase 2 are expected to take four to six weeks to complete. As a
20 practical matter, it is therefore impossible for Valley Water to receive and analyze the laboratory
21 results from well samplings, and subsequently prepare a Phase 2 report, by the 15 January 2015
22 deadline imposed in the 13267 Order. Completion of Phase 3 on top of that would be impossible
23 since Phase 2 must be completed first.

24 **5. THE MANNER IN WHICH THE PETITIONER IS AGGRIEVED:**

25 The 13267 Order requires Valley Water to undertake costly, time-consuming actions,
26 including monitoring, studies, and reports, within unreasonable and infeasible timeframes. The
27 impossibility of meeting this deadline may preclude Valley Water from timely compliance, which
28

1 in turn could expose Valley Water to unnecessary and unwarranted enforcement actions, including
2 civil and/or criminal penalties.

3 **6. THE SPECIFIC ACTION BY THE STATE OR REGIONAL BOARD WHICH**
4 **PETITIONER REQUESTS:**

5 Valley Water seeks an Order by the State Water Board invalidating and/or remanding the
6 13267 Order to the Regional Board, and requests that the State Water Board provide direction to
7 the Regional Board consistent with the arguments stated in this Petition. Specifically, Valley
8 Water requests that the State Water Board direct Regional Board staff to:

9 A. Extend the timelines for compliance with the Order by a reasonable amount of time
10 or merely include the first provision discussed above about meeting deadlines as
11 approved under the submitted Work Plans;

12 and/or

13 B. Narrow the proposed scope of the deliverables due on January 15, 2015 to be a
14 narrowed Phase 2, limited to completing (1) the determination of whether a release
15 occurred at either of the Facilities, and (2) the initial characterization of the nature
16 and extent of any releases discovered in Phase 1.

17 **7. A STATEMENT OF POINTS AND AUTHORITIES IN SUPPORT OF LEGAL**
18 **ISSUES RAISED IN THE PETITION:**

19 Valley Water's preliminary statement of points and authorities are set forth herein.
20 However, Valley Water may supplement this statement upon receipt and review of the
21 administrative record or upon the receipt of additional information. In sum, Valley Water asserts
22 that provisions of the 13267 Order are inconsistent with the law and otherwise inappropriate
23 because they are infeasible and unreasonable.²

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27 _____
28 ² Valley Water also takes issue with many of the factual allegations contained in the 13267 Order, and reserves the right to challenge those findings in any future order or enforcement action.

1 A. The Regional Board's Issuance of the 13267 Order Was Unreasonable
2 in Contravention of Water Code section 13000.

3 The California Legislature has found and declared that activities affecting water quality
4 "shall be regulated to attain the highest water quality which is *reasonable*, considering all demands
5 being made and to be made on those waters and the total values involved, beneficial and
6 detrimental, economic and social, tangible and intangible." Water Code § 13000 (emphasis
7 added). This section of the Water Code sets State policy and imposes an overriding requirement on
8 the Regional Boards that all orders be reasonable considering all circumstances.

9 Here, the deadline to meet the full list of requirements contained in the 13267 Order are not
10 reasonable, considering all of the related circumstances. As discussed in Section 4, *supra*, and
11 Valley Water's 29 July 2014 Request for Extension, Exhibit B, the Regional Board's 13267 Order
12 sets an unattainable and unreasonable deadline for compliance with Phases 2 and 3 of the
13 investigation. A deadline that all but ensures Valley Water's noncompliance is inherently
14 unreasonable, considering all of the related circumstances.

15 The requirements contained in the 13267 Order are also unreasonable because they are
16 unnecessary. Prior to its receipt of the 13267 Order, Valley Water voluntarily pursued
17 investigations at the Facilities in an effort to both hasten the analyses and to work cooperatively
18 with the Regional Board. Ignoring Valley Water's demonstrated diligence and commitment to
19 continue in this cooperative manner, the Regional Board issued the 13267 Order.

20 Although Valley Water had initially suggested a 13267 Order, that suggestion was made in
21 lieu of a Cleanup and Abatement Order and before Valley Water began its voluntary investigation
22 to determine whether releases had in fact occurred at the Facilities. On a voluntary basis, Valley
23 Water submitted a work plan for Phase 1 investigations to the Regional Board staff. This work
24 plan sought to determine whether releases occurred, and recognized that additional investigations,
25 site characterization, and evaluation of remedial alternatives (e.g., Phases 2 and 3) might be
26 required depending on the results of Phase 1. The Regional Board approved this work plan, and
27 Valley Water committed to *voluntarily* conduct all necessary work, as required, in a phased
28 approach and in coordination with Regional Board staff.

1 The 13267 Order documents Regional Board's support for the use of phased investigations
2 *see* Exhibit A at pp. 7-8, 10) and Assistant Executive Officer Clay Rodgers reiterated this support
3 frequently. The use of phased or sequential investigations is appropriate given the facts of this case
4 and, is wholly inconsistent with the unreasonable January 15, 2015 investigation completion
5 deadline.

6 In light of the circumstances here — namely, Valley Water's ongoing commitment to
7 conduct the necessary investigations and to fully cooperate with the Regional Board —the
8 additional oversight and tight deadline are unreasonable under Water Code section 13000. The
9 harsh deadline is necessarily arbitrary and does nothing to improve the investigation, but rather
10 serves only to increase the likelihood that Valley Water will be held liable for violations of the
11 13267 Order in the future, particularly when the unreasonably and unnecessarily compressed
12 timelines set Valley Water up for failure.

13 While the State Water Board's 2010 Enforcement Policy recognizes that "[t]here is a point
14 [] at which [the] cooperative approach should make way for a more forceful approach," the
15 cooperation between Valley Water and the Regional Board has not broken down such that the
16 highly compressed deadline imposed by the 13267 Order could be considered reasonable under
17 California Water Code section 13000.

18 **8. A STATEMENT THAT THE PETITION HAS BEEN SENT TO THE REGIONAL**
19 **BOARD AND TO THE DISCHARGER, IF NOT THE PETITIONER:**

20 A true and correct copy of this Petition was mailed by First Class Mail on 31 July 2014 to
21 the Regional Board at the following address:

22 Pamela C. Creedon
23 Executive Officer
24 California Regional Water Quality Control Board
25 Central Valley Region
26 11020 Sun Center Drive, #200
27 Rancho Cordova, California 95670-6114

28 The Petitioner in this case is the recipient of the 13267 Order; therefore, a Petition was not
separately sent to the recipient.

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9. A STATEMENT THAT THE SUBSTANTIVE ISSUES OR OBJECTIONS RAISED IN THE PETITION WERE RAISED BEFORE THE REGIONAL BOARD:

Pursuant to Water Code section 13267, the 13267 Order was issued by the Assistant Executive Officer of the Regional Board, Mr. Clay Rodgers, without any public notice and/or comment period. Prior to issuance of this 13267 Order, Valley Water had expressed its concerns about the compressed and unattainable schedule and, therefore, raised the substantive issues or objections contained in this Petition to the Regional Board prior to issuance of the 13267 Order. In addition, on 29 July 2014, Valley Water submitted a Request for Extension to the Regional Board, and is currently awaiting the Regional Board's response.

Dated: July 31, 2014

DOWNEY BRAND LLP

Respectfully Submitted,



Melissa A. Thorne

Special Counsel to
VALLEY WATER MANAGEMENT COMPANY

EXHIBIT A



EDMUND G. BROWN JR.
GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

1 July 2014

Larry Bright
Valley Water Management Company
7500 Meany Avenue
Bakersfield, CA 93308

CERTIFIED MAIL
7013 2250 0002 0464 3904

CALIFORNIA WATER CODE DIRECTIVE PURSUANT TO SECTION 13267. You are legally obligated to respond to this Order. Please read this Order carefully.

Valley Water Management Company (Valley Water) is the owner and operator of the Fee 34 Facility and Race Track Hill Area in the Edison Oil Field area in Kern County (jointly referred to as Facilities). The Fee 34 Facility is in the southwest quarter of the southwest quarter of Section 34, T29S, R29E, MDB&M (approximately 3.84 acres). The Race Track Hill Area is in the west-half of Section 24, T29S, R29E, MDB&M (approximately 320 acres).

The Fee 34 Facility contains six surface impoundments. Wastewater is transported to the facility by pipeline from various small, independent oil company leases throughout the Edison Oil Field. The wastewater is stored in three gunite-lined impoundments and eventually pumped via pipeline to Valley Water's Race Track Hill Area for disposal. Crude oil is stored in two unlined oil recovery impoundments south of the wastewater impoundments until shipment off-site. There is one unlined contingency impoundment for stormwater retention and temporary storage of excess wastewater. Dimensions of the impoundments range from approximately 30 feet (ft.) x 50 ft. to 120 ft. x 180 ft., and are approximately ten to fifteen feet deep.

The Race Track Hill Area contains 27 unlined surface impoundments and approximately 94 acres of land used for surface sprinkler irrigation disposal. Wastewater is transported to the facility by pipeline from Valley Water's Fee 34 Facility, which is about four miles to the southwest in the Edison Oil Field. The wastewater is discharged to the impoundments for percolation and evaporation. Excess wastewater that does not percolate or evaporate is sprayed onto 94 acres for disposal by evapotranspiration.

The Fee 34 Facility is regulated by Waste Discharge Requirements Order 92-110 (WDRs) and Notice of Applicability Order 92-11037. Order 92-110 sets forth general waste discharge requirements for the discharge of oil field produced wastewaters from Edison Oil Field operations. Discharge Specification B.1. of Order 92-110 states that wastewater effluent discharge to sumps that do not meet the prescriptive construction criteria for classified waste management units as specified in Chapter 15 (subsequently re-codified in Title 27, CCR, section 20005 et seq. (Title 27) in 1997) shall not exceed the following limits (as specified in the *Water Quality Control Plan for the Tulare Lake Basin, 5D*): 1,000 micromhos per centimeter ($\mu\text{mhos/cm}$) electrical conductivity; 200 milligrams/liter (mg/l) chloride; and

KARL E. LONGLEY ScD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCCE, EXECUTIVE OFFICER

1.0 mg/l boron. Dischargers with waste water effluent in excess of the numerical limitations established in Discharge Specification B.1. were required to achieve compliance with Order 92-110 within four years pursuant to Discharge Specification B.2.

Order 92-11037 is the Notice of Applicability (NOA) of the general WDRs to the Fee 34 Facility, and includes in the NOA a description of a chemical analysis of the wastewater with the following characteristics: 7,900 µmhos/cm electrical conductivity; 4,450 mg/l chloride; and 15.6 mg/l boron. Valley Water's discharge at the Fee 34 Facility was not in compliance with the Tulare Lake Basin Plan.

The Race Track Hill Area is regulated by Central Valley Water Board Resolution 58-349. Resolution 58-349 sets forth waste discharge requirements for the discharge of oil field produced wastewater at the Race Track Hill Area. Resolution 58-349 allows the discharge of oil field produced wastewater to surface impoundments in Section 24 with no waste constituent limitations. Requirement 3 of Resolution 58-349 states:

- "3. Waste water discharged or overflowing onto the surface of the ground, or into natural drainage channels or into unlined sumps other than those constructed in Section 24, T29S, R29E, MDB&M shall conform to the following criteria:
- a. Total dissolved solids shall not exceed 1000 parts per million.
 - b. Chlorides shall not exceed 150 parts per million.
 - c. Boron shall not exceed 1.0 part per million."

Resolution 58-349 allows the discharge of oil field-produced wastewater to the ground surface, or into natural drainage channels, or into unlined surface impoundments other than those constructed in Section 24, provided the wastewater conforms to the criteria listed in section 3.a.-c. of Resolution 58-349 (quoted immediately above).

The *Water Quality Control Plan for the Tulare Lake Basin, Second Edition* (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation plans and policies for all waters of the Basin. Resolution 58-349 predates the Basin Plan and does not contain identical limitations on the discharge of oil field-produced wastewater to surface impoundments that are contained in the Basin Plan.

The Fee 34 Facility is in the Kern County Basin Hydrologic Unit, Detailed Analysis Unit (DAU) 258. The designated beneficial uses of the groundwater, as specified in the Basin Plan for DAU 258, are municipal and domestic water supply, agricultural supply, industrial service and process supply.

Information obtained from the California Department of Water Resources identified 36 groundwater supply wells within about one-mile of the Fee 34 Facility. The groundwater is primarily used for agricultural supply. Driller's reports for 19 of the wells identify six domestic supply wells, twelve agricultural supply wells, and one industrial supply well.

The Race Track Hill Area is in the Kern County Basin Hydrologic Unit, Detailed Analysis Unit (DAU) 257. The designated beneficial uses of the groundwater, as specified in the Basin Plan for DAU 257, are municipal and domestic water supply, agricultural supply, industrial service supply, and recreation-1 supply.

Although Resolution 58-349 found "no freshwater producing wells in this vicinity," more recent information obtained from the California Department of Water Resources identified six groundwater supply wells within one-mile of the Race Track Hill Area. Groundwater from these wells may have been used for domestic water supply, agriculture supply, and industrial service supply. The current status of these wells is not clear and some may have been destroyed.

This Order is based upon the 27 November 2012 and 18 September 2013 Central Valley Water Board inspections of the Fee 34 Facility, and based upon Valley Water's wastewater analysis lab report dated 23 July 2013 regarding concentrations of specific electrical conductivity (EC), chloride, and boron. The Basin Plan and Order 92-110 for Edison Oil Field Operators set forth the following specific waste constituent limits for discharges of oil field wastewater to unlined sumps:

| | <u>Units:</u> | <u>Limitation Value:</u> |
|---------------------|---------------|--------------------------|
| <u>Specific EC:</u> | µmhos/cm | 1000 |
| <u>Chloride:</u> | mg/l | 200 |
| <u>Boron:</u> | mg/l | 1 |

The 23 July 2013 wastewater analytical results at the Fee 34 Facility were measured at the following concentrations:

| | <u>Units:</u> | <u>Measured Value:</u> |
|---------------------|---------------|------------------------|
| <u>Specific EC:</u> | µmhos/cm | 5,700 |
| <u>Chloride:</u> | mg/l | 1,800 |
| <u>Boron:</u> | mg/l | 14 |

On 24 May 1996, Valley Waste Disposal Company, the predecessor of Valley Water, submitted the report *Drilling and Data Acquisition Report, Race Track Hill District, Edison Oil Field, Kern County, California*. The report was submitted pursuant to Discharge Specification B.2.c. of Order 92-110. The report and transmittal letter stated that the Fee 34 Facility "... does not pose a threat to ground water quality and that no further action should be required for continued operation of the site." The transmittal letter also requested a hearing if necessary to demonstrate that the facility does not pose a threat to groundwater quality. Former Central Valley Water Board staff reviewed the report and transmittal letter. Neither a response nor an evaluation to the report can be found in the site files, and Valley Water was not provided with a hearing before the Central Valley Water Board to present its case. Current Central Valley Water Board staff reviewed the report and transmittal letter and found it inadequate to demonstrate that there have been no impacts, or that there is no threat to groundwater.

On 9 October 2013, the Central Valley Water Board issued a Notice of Violation (NOV) to Valley Water. The NOV alleged that Valley Water's discharge was in violation of Discharge Specifications B.1 and B.6 of Order 92-110, and that Valley Water was discharging wastewater in excess of the numerical limitations specified in Discharge Specification B.1 (see data above), which is causing, or is threatening to cause a condition of pollution, contamination or nuisance. In addition, the NOV alleged Valley Water also failed to maintain the minimum freeboard of two feet in two of the impoundments as specified in Discharge Specification B.6, which is causing, or is threatening to cause, a condition of pollution, contamination, or nuisance caused by overtopping the impoundments. Valley Water submitted a response to the NOV on 8 November 2013.

This Order is also based upon both the 18 September 2013 Central Valley Water Board inspection of the Race Track Hill Facility, and Valley Water's wastewater analysis lab report dated 23 July 2013 for the Fee 34 Facility regarding concentrations of specific electrical conductivity (EC) in micromhos/centimeter ($\mu\text{mhos/cm}$), chloride in milligrams/liter (mg/l), and boron in mg/l. The Basin Plan and Resolution 58-349 set forth the following waste constituent limits for the discharge of oil field wastewater:

| | <u>Units:</u> | <u>Basin Plan Limitation Value:</u> | <u>Res. 58-349 Limitation Value:</u> |
|--------------------------------|---------------------|---|--|
| <u>Specific EC:</u> | $\mu\text{mhos/cm}$ | 1000 | |
| <u>Total Dissolved Solids:</u> | mg/l (ppm) | | 1000 |
| <u>Chloride:</u> | mg/l | 200 | 150 |
| <u>Boron:</u> | mg/l | 1 | 1 |

The 23 July 2013 wastewater analytical results at Fee 34 Facility were measured at the following concentrations:

| | <u>Units:</u> | <u>Measured Value:</u> |
|---------------------|---------------------|------------------------|
| <u>Specific EC:</u> | $\mu\text{mhos/cm}$ | 5,700 |
| <u>Chloride:</u> | mg/l | 1,800 |
| <u>Boron:</u> | mg/l | 14 |

On 9 October 2013, the Central Valley Water Board issued a Notice of Violation (NOV) to Valley Water. The NOV alleged that Valley Water's discharge was in violation of Resolved 3.A., B., and C. of Resolution 58-349. Valley Water was discharging wastewater effluent to the ground surface in excess of the numerical limitations specified in Resolved 3.A., B., and C. (see data above), which is causing, or is threatening to cause, a condition of pollution, contamination or nuisance. Valley Water submitted a response to the NOV on 8 November 2013.

The unauthorized discharge of waste with high salinity and boron concentrations to ground and/or groundwater creates, or threatens to create, a condition of pollution in groundwater, and may result in the degradation of water quality.

Land around the Fee 34 Facility is being used for agricultural production, primarily grapes, citrus, and field crops. Many of the crops are irrigated with groundwater from local supply wells. Irrigation water with a chloride concentration above 350 mg/l can cause severe crop problems, and boron toxicity can occur on sensitive crops at concentrations less than 1 mg/l in irrigation water (Bauder, T.A, Waskon, R.M., and Davis, J.G., 2007, *Irrigation Water Quality Criteria*, Colorado State University Extension, Fact Sheet No. 0.506).

Land around the Race Track Hill Area has been used for open stock grazing. Oranges are currently grown about two miles southwest of the Race Track Hill Area, and vineyards are present about 2.5 miles to the southwest. Many of the crops are irrigated with groundwater from local supply wells. As stated above, irrigation water with a chloride concentration above 350 mg/l can cause severe crop problems. Boron toxicity can occur on sensitive crops at concentrations less than 1 mg/l in irrigation water (*ibid.*).

Two studies of the hydrogeology and groundwater in the Race Track Hill Area were conducted in the 1960s and the reports were submitted to the Central Valley Water Board. One report, entitled *Edison Landowners & Farmers Waste Water Pollution Problem, First Meeting, January 28, 1960*, by Henry R. Clark (Edison Farmer's Report), was prepared on behalf of farmers in the Edison area. The second report, entitled *Report of Investigation of Waste Water Disposal Operations, Edison Area, Kern County, California, May 1960*, by John C. Manning (Valley Water Report), was prepared on behalf of Valley Waste Disposal Company (former name of Valley Water).

The Edison Farmer's Report includes a contour map on the top of the Santa Margarita Formation, three cross-sections, and one electric log from a well drilled in the northwest portion of the Race Track Hill Area. The electric log begins at a depth of 200 feet in the Santa Margarita Formation, and the base of the Santa Margarita Formation is at 1,160 feet. The structure map shows the Santa Margarita Formation dipping between six and eight degrees to the southwest. The Edison Farmer's Report describes the Santa Margarita Formation as very porous and easily permeable, with the water table at an elevation of 250 feet above mean sea level, with the groundwater saturating the lower 300 feet of the Santa Margarita Formation. The Edison Farmer's Report states that wells were producing water from the Santa Margarita Formation for irrigation in sections 27 and 36, of T29S, R29E (southwest and south of the Race Track Hill Area respectively). The Edison Farmer's Report concludes that water percolating from the Race Track Hill Area sumps will percolate to the top of the Round Mountain silt (at the base of the Santa Margarita Formation) and move southwesterly to water supply wells and that irrigation water is being polluted.

The Valley Water Report includes a generalized geologic map and cross-section. The geologic map shows the surface contacts of the Kern River-Chanac Formation, Santa Margarita Formation, and Round Mountain Silt; known faults within the area; and water and oil wells as of 1960. The cross-section includes wells along and projected onto the cross-section. Four water supply wells are shown as being completed in the Santa Margarita Formation, and three water supply wells are shown completed in the Kern River Chanac Formation. Groundwater in the Kern River-Chanac Formation is unconfined and groundwater in the Santa Margarita Formation down-dip from the Race Track Hill Area is confined.

The Valley Water Report concludes that average groundwater flow in the Santa Margarita Formation is about 15 to 20 feet per year down-gradient, and that the average annual dilution factor is about three-tenths of one percent for wastewater relative to formation water. The faults are believed to form barriers to groundwater flow, which will help to contain wastewater. The Valley Water Report concludes that there is no threat of pollution from wastewater disposal at the Race Track Hill Area to the aquifers in the Edison area, and that it would take a number of years for percolation to reach the down-dip boundary of the Race Track Hill Area.

In 1991 a water supply well was drilled about 850 feet south of the southwest corner of the Race Track Hill Area as a domestic supply well. The well was drilled to a total depth of 460 feet, and was screened from 360 to 460 feet in the Santa Margarita Formation. The static water level in the completed well was at a depth of 296 feet, indicative of confined water in the Santa Margarita Formation.

Due to the topographic relief at the Race Track Hill Area and the relatively close proximity (one-half mile) to Cottonwood Creek, a major storm could flush a portion of the accumulated salts discharged to the spray field over the past 50-60 years into Cottonwood Creek, which could then be transported to the Kern River 2.5 miles downstream. This could result in a temporary salt and boron loading of water in

the Kern River, and increase salt and boron loading to groundwaters at the terminus of Kern River flow where groundwater is recharged.

Underlying groundwater will be degraded if mixed with high salinity oil field wastewater. Elevated EC, chloride, and boron levels could impair the groundwater for municipal and domestic supply and agricultural supply uses.

The Basin Plan (on page IV-15) states that the discharge of produced wastewater to land, where the concentration of constituents may cause ground water to exceed water quality objectives, shall be subject to the requirements contained in the California Code of Regulations, Title 23, Section 2510, et seq. (Chapter 15)(re-codified to Title 27). Since the concentration of waste constituents in Valley Water's discharge may cause ground water to exceed water quality objectives, it is appropriate that the investigation be consistent with the requirements and goals of Title 27.

An investigation is necessary to determine whether the discharge of wastewater in excess of water quality objectives has caused or threatens to cause a threat or condition of pollution or nuisance to groundwater or surface water. Because phased investigation activity will occur near a tributary to the Kern River, Best Management Practices (BMPs) during remedial action are necessary to prevent further conditions that threaten the beneficial uses of Cottonwood Creek and the Kern River.

By this Order, the Central Valley Water Board is seeking information about Valley Water's activities, which appear to have impacts or threatened impacts to water quality. The Central Valley Water Board's authority to require technical reports derives from Section 13267 of the California Water Code, which specifies, in part, that:

(a) A regional board, ...in connection with any action relating to any plan or requirement authorized by this division, may investigate the quality of any waters of the state within its region.

(b)(1) In conducting an investigation specified in subdivision (a), the 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 within its region...that could affect the quality of waters within its region 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.

The discharge of wastewater to unlined surface impoundments or sprayed to the ground surface could have water quality impacts, or may threaten waters of the State. Technical reports required by this Order are necessary to ensure compliance with the California Water Code. Based on the nature and possible consequences of the discharges, the burden of providing the required reports, including the costs, bears a reasonable relationship to the need for the reports, and the benefits to be obtained from the reports. Valley Water owns and operates the Facilities that are subject to this Order.

A work plan to initiate the first phase of an investigation to determine the effects of the wastewater on groundwater beneath the Fee 34 Facility and Race Track Hill Area was submitted on 17 March 2014. Under the prescribed authority of California Water Code section 13267, the Central Valley Water Board directs Valley Water to develop a work plan for subsequent phases of hydrogeological site characterizations and assess potential groundwater degradation caused by more than 20 to 50 years of discharges at each Facility. The phased approach will require that once technical evaluation results from a previous phase are available, the findings will be used to develop a detailed scope for the next phase of work.

At a minimum, the investigation needs to address the following items that relate to wastewater disposal at the Facilities:

Fee 34 Facility

Valley Water has prepared and submitted to the Central Valley Water Board the First Phase Work Plan for the investigation of the impacts or threatened impacts of wastewater discharges at the Fee 34 Facility to the groundwater. The First Phase Work Plan; and each subsequent phased work plan thereafter, shall be complete and approved by the Assistant Executive Officer (or for his/her delegate's approval) and shall detail the following activities and shall include a time schedule detailing the sequence of the First Phase Work Plan activities and the time frame for completing each activity (the First Phase Work Plan was reviewed by Central Valley Water Board staff in a 4 April 2014 letter and memorandum):

- a. Conduct a hydrogeological site characterization to assess the effects of the discharge of high salinity wastewater on underlying groundwater. The characterization shall be conducted in phases to utilize acquired information to further assess the impacts of the wastewater discharge on groundwater;
- b. The hydrogeological characterization, and a determination of whether there has been a release of waste constituents to groundwater, shall be consistent with the detection monitoring requirements of Title 27, CCR, section 20005 et seq. (Title 27). This includes the location and installation of groundwater monitoring wells; soil sampling locations; and the sampling and analysis methods for groundwater and soil samples;
- c. Monitoring wells installed for the hydrogeological characterization need to be installed at appropriate depths that will allow the collection of representative groundwater samples. Existing groundwater wells documented to be in appropriate locations, where well depth and construction details can be provided, may be proposed as sampling points;
- d. Collect and submit representative groundwater and soil samples for laboratory analysis for waste constituent parameters in accordance with an approved sampling and analysis plan (SAP);
- e. Conduct a well survey to identify water supply wells within one-mile of the Fee 34 Facility. Based on the results of the hydrogeologic characterization, Valley Water may be required by the

- Assistant Executive Officer (or his/her delegate) to sample the identified wells and analyze the samples for waste constituents of concern;
- f. Analyze groundwater and soil samples at a California E-LAP certified analytical laboratory in accordance with the SAP submitted as part of the First Phase Work Plan and approved by the Assistant Executive Officer (or his/her delegate). The parameters and constituents to be analyzed shall be included in the SAP and each phased Work Plan approved by the Assistant Executive Officer (or his/her delegate);
 - g. If the investigation determines that a release of wastewater to groundwater or soils has occurred, the hydrogeological characterization shall include a characterization of the nature and extent of the release consistent with the evaluation monitoring program requirements contained in Title 27;
 - h. If the investigation determines that a release of wastewater to groundwater or soils has occurred, then following the characterization of the nature and extent of the release, a groundwater remedial action plan shall be submitted for Assistant Executive Officer (or his/her delegate) review and approval that is consistent with the corrective action program requirements contained in Title 27. This will entail the preparation of an engineering feasibility study followed by a proposed corrective action program;
 - i. Implementation of BMPs to minimize further discharges of waste to groundwater; and
 - j. Based on information acquired during the hydrogeological site characterization, submit a revised report of waste discharge for revision of the waste discharge requirements, if appropriate, consistent with current regulations and policies.

Race Track Hill Area

Valley Water has prepared and submitted to the Central Valley Water Board the First Phase Work Plan for the investigation of the impacts or threatened impacts of wastewater discharges at the Race Track Hill Area to the groundwater, soils and surface water. The First Phase Work Plan, and each subsequent phased work plan thereafter, shall be complete and approved by the Assistant Executive Officer (or for his/her delegate's approval) and shall detail the following activities and shall include a time schedule detailing the sequence of the First Phase Work Plan activities and the time frame for completing each activity (the First Phase Work Plan was reviewed by Central Valley Water Board staff in a 4 April 2014 letter and memorandum):

- k. Conduct a hydrogeological site characterization to assess the effects of the discharge of high salinity wastewater on underlying groundwater, site soils, and Cottonwood Creek. The characterization shall be conducted in phases to utilize acquired information to further assess the impacts of the wastewater discharge on groundwater and surface water;
- l. The hydrogeological characterization, and a determination of whether there has been a release of waste constituents to groundwater, soils, or surface water shall be consistent with the detection monitoring requirements of Title 27. This includes the location and installation of groundwater monitoring wells; surface water and soil sampling locations; and the sampling and

analysis methods for groundwater, surface water, and soil samples;

- m. Monitoring wells installed for the hydrogeological characterization need to be installed at appropriate depths that will allow the collection of representative groundwater samples. Existing groundwater wells documented to be in appropriate locations, where well depth and construction details can be provided, may be proposed as sampling points;
- n. Collect and submit representative groundwater, soil, and surface water samples for laboratory analysis for waste constituent parameters in accordance with an approved sampling and analysis plan (SAP);
- o. Conduct a well survey to identify water supply wells within one-mile of the Race Track Hill Area. Based on the results of the hydrogeologic characterization, Valley Water may be required by the Assistant Executive Officer (or his/her delegate) to sample the identified wells and analyze the samples for waste constituents of concern;
- p. Analyze groundwater, surface water, and soil samples at a California E-LAP certified analytical laboratory in accordance with the SAP submitted as part of the First Phase Work Plan and approved by the Assistant Executive Officer (or his/her delegate). The parameters and constituents to be analyzed shall be included in the SAP and each phased Work Plan approved by the Assistant Executive Officer (or his/her delegate);
- q. If the investigation determines that a release of wastewater to groundwater, surface water, or soils has occurred, the hydrogeological characterization shall include a characterization of the nature and extent of the release consistent with the evaluation monitoring program requirements contained in Title 27;
- r. If the investigation determines that a release of wastewater to groundwater, surface water, or soils has occurred, then following the characterization of the nature and extent of the release, a groundwater, surface water, and/or soil remediation program shall be submitted for Assistant Executive Officer (or his/her delegate) review and approval that is consistent with the corrective action program requirements contained in Title 27. This will entail the preparation of an engineering feasibility study followed by a proposed corrective action program;
- s. Implementation of BMPs to minimize further discharges of waste to groundwater, surface waters, or soils; and
- t. Based on information acquired during the hydrogeological site characterization, submit a revised report of waste discharge for revision of the waste discharge requirements consistent with current regulations and policies.

Valley Water shall implement each phased Work Plan as approved by the Assistant Executive Officer (or his/her delegate) in accordance with the approved time schedule included in each phased Work Plan.

Beginning **1 September 2014**, or a date approved by the Assistant Executive Officer (or his/her delegate), and quarterly thereafter until all Work Plan activities are complete, Valley Water shall submit

technical reports that provide information to document the Work Plan activities completed to date and to ultimately document that all elements of the Work Plan have been completed. Corrective actions shall be proposed and included in these technical reports when Work Plan activities fail to satisfy any interim or final success criteria.

All activities in each Phased Work Plan shall be completed in accordance with time frames included in each Phased Work Plan as approved by the Assistant Executive Officer (or his/her delegate).

By 15 January 2015, the investigations at both Facilities shall be completed and the final report submitted for review by the Assistant Executive Officer (or his/her delegate):

With each report required by this Order, Valley Water shall provide under penalty of perjury under the laws of California a "Certification" statement to the Central Valley Water Board. The "Certification" shall include the following signed statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Pursuant to Water Code section 13350, any person who intentionally or negligently violates an order may be liable civilly in an amount which shall not exceed five thousand dollars (\$5,000), but shall not be less than five hundred dollars (\$500), for each day in which the order is violated.

If it is determined that discharges from the Fee 34 Facility or the Race Track Hill Area have impacted the beneficial uses of water, Valley Water can be further required upon notification by the Assistant Executive Officer (or his/her delegate) to provide a replacement water supply or treat the water to allow continued use.

The Central Valley Water Board reserves the right to issue a Notice of Violation or pursue enforcement for Valley Water's activities after reviewing the documentation provided in response to this Order.

Technical report(s) are to be signed and stamped by a California Professional Engineer (Registered as a Civil Engineer) or a registered California Professional Geologist. Any laboratory analyses shall be performed by an analytical laboratory certified by the State of California for the analyses performed. Submissions pursuant to this Order shall include a statement by Valley Water, or an authorized representative of Valley Water, certifying (as described above) that the information submitted is true, complete, and accurate.

The failure to furnish any of the required reports, or the submission of substantially incomplete reports or false information, is a misdemeanor, and may result in additional enforcement actions being taken against Valley Water, including issuance of an Administrative Civil Liability Complaint pursuant to

Larry Bright
Valley Water Management Co.
Fee 34 Facility and Race Track Hill Area
Edison Area, Kern County

- 11 -

1 July 2014

California Water Code section 13268. Liability may be imposed pursuant to California Water Code section 13268 in an amount not to exceed one thousand dollars (\$1,000) for each day in which the violation occurs.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., within 30 days after the date of this directive, except that if the thirtieth day following the date of this directive falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

If you have any questions regarding this matter, please contact Doug Patteson of this office at (559) 445-5577 or at dpatteson@waterboards.ca.gov.



CLAY L. RODGERS
Assistant Executive Officer

cc: Julie Macedo, Office of Enforcement, State Water Resources Control Board, Sacramento
Mike Toland, California Division of Oil, Gas, and Geothermal Resources, Bakersfield
Kern County Environmental Health, Bakersfield
Gary Carlton, Kennedy/Jenks Consultants, Rancho Cordova, CA

EXHIBIT B

VALLEY WATER MANAGEMENT COMPANY

7500 MEANY AVE.
BAKERSFIELD, CALIFORNIA 93308

July 29, 2014

Mr. Clay Rodgers
Assistant Executive Officer
Central Valley Regional Water Quality Control Board
1685 E Street
Fresno, CA 93706

Dear Mr. Rodgers,

Valley Water Management Company (VWMC) received the 13267 Order dated 1 July 2014 signed by the Central Valley Regional Water Quality Control Board (Regional Board). This Order, which was delivered to our office on 7 July 2014, via certified mail, relates to the site investigations and related studies currently underway at our Fee 34 Facility and Race Track Hill Area Facility in the Edison Oil Field.

We are writing this letter to once again reiterate to you the impossibility we face in complying with the requirement to complete all the work described in your Order by the final completion date of 15 January 2015 as contained in the Order. The circumstances that contribute to our inability to comply with this schedule were presented in our comment letter, dated 6 June 2014, on the draft 13267 Order and were again described by our consultant when you provided him with an advance copy of the final Order in your office on 1 July 2014. We once again present the basis for our concerns with the schedule contained in the 13267 Order.

The work required to be performed by VWMC in the Order consists of three basic tasks:

1. Conduct investigations and studies necessary to determine whether potential adverse impacts on soil and groundwater quality have occurred.
2. Characterize the nature and extent of release, if any, from the subject facilities.
3. Once the characterization is complete, conduct studies to evaluate what corrective measures, if any, need to be taken to protect existing and potential future uses of impacted soils and groundwater.

Step 2 cannot be undertaken until Step 1 is completed and Step 3 cannot be completed without first completing Step 2. We have worked collaboratively with Regional Board staff to this point to agree that a phased approach is the most effective approach to conducting the Phase 1 investigations. Our Phase 1 work plan was presented to you and your staff in January 2014 and subsequently revised to incorporate input received at that meeting. Phase 1 field work has been completed, results are being analyzed and a report will be submitted in early August. The Phase 1 report will include our proposed work plan for Phase 2 investigations which we anticipate to lead to planning and scheduling of Phase 2 field activities in early September after receipt of your comments on the proposed Phase 2 work plan.

We have been in contact with the drilling company for Phase 2 well installation and have been advised that there is currently a 3-month lead time to initiate drilling once they have received a firm commitment, which may include a substantial deposit which may not be refundable in the event of cancellation of the drilling program. Thus, we anticipate drilling operations to commence in October, at

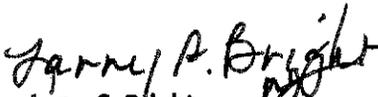
the earliest, and very possibly not until November. Drilling, well construction, development, sampling, and water quality analysis are expected to take 4-6 weeks. Accordingly, we will be hard pressed to receive and analyze laboratory reports from well samplings and prepare a Phase 2 report by the 15 January 2015 deadline set forth in your Order.

If the Phase 2 investigations do, in fact, satisfy your requirements for defining the nature and extent and release, if any, we will then require a minimum of an additional six months to conduct the evaluation of what, if anything need be done in response to the release. Alternatively, if the Phase 2 investigations do not adequately define the nature and extent of the release, a third phase of characterization will be required before the evaluation of need for corrective action can commence.

VWMC has pursued investigations at Race Track Hill and the Fee 34 Facility in a voluntary manner in advance of receiving a 13267 Order in order to hasten the investigations. VWMC intends to continue investigations diligently. Yet in spite of our demonstrated diligence and commitment to continue in this manner, it is not possible for us to comply with the schedule set forth in the Order. For these reasons and as stated before, we suggest that the January date be extended.

Thank you for your consideration of this request.

Sincerely,


Larry S. Bright
Manager