

1 LEE N. SMITH (SB #138071)
2 MELISSA A. VERHAAG (SB #226755)
3 STOEL RIVES LLP
4 770 L Street, Suite 800
5 Sacramento, CA 95814
6 Telephone: (916) 447-0700
7 Facsimile: (916) 447-4781

8
9 Attorneys for Petitioners
10 Darrell D. Mann & Cheri R. Mann

11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
BEFORE THE STATE WATER RESOURCES CONTROL BOARD

In Re: PETITION OF DARRELL D. MANN
& CHERI R. MANN FOR REVIEW OF
CLEANUP AND ABATEMENT ORDER NO.
R5-2006-0705

PETITION FOR REVIEW

Water Code § 13320

California Regional Water Quality Control
Board, Central Valley Region, Order No. R5-
2006-0705

Petitioners Darrell D. Mann & Cheri R. Mann (“Petitioners”), by and through their
counsel of record, Stoel Rives LLP, hereby request review by the State Water Resources
Control Board (“State Board”) of certain provisions of Cleanup and Abatement Order No. R5-
2006-0705 (the “Order”), issued by the Regional Water Quality Control Board, Central Valley
Region (“Regional Board”), pursuant to Water Code section 13320 and 23 Cal. Code Regs. §§
2050 *et seq.* Regional Board staff issued the Order without first holding a public hearing; thus,
there is no hearing transcript.

Concurrently with the filing of this Petition for Review (“Petition”), Petitioners request
that the Petition be held in abeyance pursuant to 23 Cal. Code Regs. section 2050.5(d).
Petitioners reserve the right to supplement and/or augment the Petition and the Points and
Authorities contained herein if the State Board does not grant Petitioners’ request for abeyance,
or should the Petition be removed from abeyance in the future.

1 **I. NAME AND ADDRESS OF PETITIONERS**

2 Darrell D. Mann & Cheryl R. Mann
3 10207 Crandon Park Drive
4 Bakersfield, California 93312
5 Telephone: (661) 589-8829
6 Email: grumpygranite@hotmail.com

7 By and through their attorneys of record:
8 Lee N. Smith
9 Stoel Rives LLP
770 L Street, Suite 800
Sacramento, California 95814
Telephone: (916) 447-0700
Email: lnsmith@stoel.com

10 **II. ACTIONS BY THE REGIONAL BOARD THAT PETITIONERS' REQUEST THE STATE BOARD REVIEW.**

11 Petitioners are the current owners of a commercial gasoline service station, known as the
12 Shaver Lake Food Mart, in Shaver Lake, California. Petitioners are herein requesting review of
13 portions of Cleanup and Abatement Order ("CAO") No. R5-2006-0705 (the "Order") adopted by
14 the Regional Board on October 5, 2006, a copy of which is attached hereto as **Appendix A**. The
15 Order relates to the Shaver Lake Food Mart site located at 41801 Tollhouse Road in Shaver Lake,
16 California.

17 **III. THE DATE ON WHICH THE REGIONAL BOARD ACTED.**

18 The Executive Officer of the Regional Board executed Order No. R5-2006-0530 on
19 October 5, 2006, without the benefit of a public hearing.

20 **IV. STATEMENT OF REASONS WHY ACTION WAS IMPROPER.**

21 In early 2005, the State of California Underground Storage Tank Fund (the "Fund")
22 officially denied Petitioners' application for coverage under the Fund because Petitioners did not
23 have a permit at all times, which was caused solely by Fresno County not regularly issuing
24 permits in the early 1980s.¹ Recently, Petitioners filed an appeal with the Fund, seeking
25 reimbursement of the funds they have spent to date in investigation and monitoring costs.
26 Petitioners cannot comply with the terms of the Order until their Fund appeal is granted and the

27 ¹ In addition, Petitioners are having difficulty obtaining County records that would support
28 their application for coverage under the Fund.

1 Fund has reimbursed them the funds sought in their appeal.

2 Via letter dated September 27, 2006, a copy of which is attached hereto as **Appendix B**,
3 Petitioners requested that the Regional Board name other dischargers in the Order, including
4 former owners of the site as well as potential dischargers also located in the area of the Shaver
5 Lake Food Mart. The source of the contamination has not been identified by the Regional Board
6 and Petitioners believe that it is unfair at this juncture to require them alone to be responsible for
7 investigation and remediation of the groundwater contamination in the area of the Shaver Lake
8 Food Mart. The Order expressly requires that Petitioners investigate whether the Shaver Lake
9 Food Mart is the source of contamination found in the water well located at 41782 Dorabella
10 Road, a well that is hydraulically upgradient from the Food Mart. (Order at p. 2, Finding 4; Order
11 at pp. 8-9, Item 5.) The Regional Board issued the Order to the Petitioners without a full
12 investigation of possible sources of contamination and without identifying both former owners of
13 the site and potential dischargers of the contamination in the Order. Thus, Petitioners' contend
14 that the Regional Board should have investigated and included other potential dischargers in the
15 Order before issuing the Order to Petitioners.

16 **V. THE MANNER IN WHICH PETITIONERS ARE AGGRIEVED.**

17 Petitioners are required to comply with portions of an Order that are beyond Petitioners'
18 financial means. While Petitioners believe that they can comply with the requirements of the
19 Order through the end of February 2007, Petitioners do not have the ability to pay for any of the
20 Order's requirements past February 2007 without assistance from the Fund. Petitioners' appeal
21 for Fund assistance is currently pending and thus Petitioners request that the State Board require
22 the Regional Board to further investigate potential dischargers and include not only former
23 owners in the Order as dischargers, but other potential sources in the area as well. As the Order is
24 currently drafted, the sole responsibility for cleanup of groundwater contamination in the Shaver
25 Lake area rests with Petitioners, yet the source of the contamination has not been confirmed by
26 the Regional Board. Since Petitioners do not have the financial solvency to cover the costs
27 associated with full compliance with the terms of the Order, and due to the fact that the Regional
28

1 Board did not include other dischargers in the Order as potential sources of the groundwater
2 contamination, Petitioners are unjustly aggrieved by the Order.

3
4 **VI. THE SPECIFIC ACTION BY THE STATE BOARD OR REGIONAL BOARD
THAT PETITIONERS' REQUEST.**

5 Petitioners respectfully requests that the State Board do the following:

- 6 1. Postpone implementation and enforcement of the Order until Petitioners are
7 approved for reimbursement of claims by the California Underground Storage
8 Tank Cleanup Fund; or
- 9 2. Extend the compliance dates in the Order to future dates wherein Petitioners will
10 not be in violation of the Order, thus allowing Petitioners time to receive approval
11 and acceptance into the Underground Storage Tank Cleanup Fund to assist in costs
12 associated with complying with the Order; and
- 13 3. Place this Petition in abeyance until Petitioners' application and appeal for
14 coverage under the Fund is resolved; and
- 15 4. Conduct or require that the Regional Board conduct a public hearing regarding the
16 provisions of the Order.

17 **VII. STATEMENT OF POINTS AND AUTHORITIES IN SUPPORT OF LEGAL
18 ISSUES RAISED HEREIN.**

19 Petitioners contend that the Order was prematurely issued to Petitioners before a full
20 investigation of the source of the contamination was completed by the Regional Board. The
21 Board's failure to include former owners of the site as well as other potential sources as
22 dischargers named in the Order contradicts substantial evidence in the record that evidences the
23 fact that a complete investigation of the contaminant source has not yet been identified and that
24 other potential dischargers exist.

25 **A. Standard of Review.**

26 Pursuant to Water Code section 13320(c), the State Board may find that the actions of the
27 Regional Board were inappropriate or improper. (Water Code § 13320(c).) Upon finding that the
28 actions of the Regional Board were inappropriate or improper, the State Board may direct that the

1 appropriate action be taken by the Regional Board, refer the matter to any other state agency
2 having jurisdiction, take the appropriate action itself, or take any combination of those actions.

3 (*Id.*)

4 **B. Actions Taken by the Regional Board Must Be Based on Substantial Evidence**
5 **in the Record.**

6 In determining whether an action of the Regional Board was appropriate and/or proper,
7 the State Board must weigh whether there was substantial evidence in the record, taken as a
8 whole, to support the Regional Board's action. (*See, e.g., In re Ventura County Citizens to Stop*
9 *Towland Landfill*, Order No. WQ 98-02 (Apr. 16, 1998).) Under the substantial evidence
10 standard of review, the reviewing entity regards the weight and sufficiency of evidence submitted
11 regarding matters of administrative discretion and will sustain an agency's decision if substantial
12 evidence supports the decision. (*Floresta, Inc. v. City Council of San Leandro*, 190 Cal. App. 2d
13 599, 608-09 (1961).)

14 **VIII. STATEMENT OF TRANSMISSION OF PETITION TO REGIONAL BOARD.**

15 A copy of this Petition is being concurrently transmitted to the Executive Officer of the
16 Central Valley Regional Water Quality Control Board as of the date of filing of this document.
17 The Memorandum of Points and Authorities will be submitted 10 working days after Petitioners
18 receive a copy of the transcript of a public hearing regarding the CAO.

19 **IX. STATEMENT REGARDING WHETHER THE SUBSTANTIVE ISSUES OR**
20 **OBJECTIONS CONTAINED HEREIN WERE RAISED BEFORE THE**
21 **REGIONAL BOARD.**

22 Although Petitioners engaged in a discussion with the Regional Board regarding the terms
23 of the Order prior to the Regional Board issuing the Order on October 5, 2006, Petitioners were
24 not given the opportunity to have a public hearing on the draft Order before the final Order was
25 executed. Petitioners did provide the Regional Board with two sets of written comments on the
26 draft Order (*see Appendix B and Appendix C*) that confirm that the issues raised herein were
27 previously brought to the attention of the Regional Board.
28

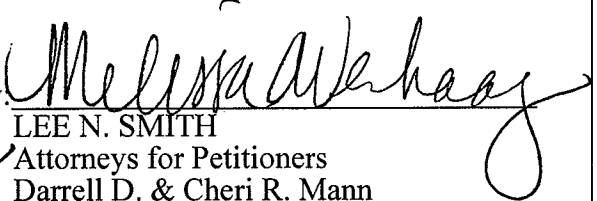
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

X. INTERESTED PARTIES.

The attached Order (Appendix A) contains a list of the names and addresses of interested parties.

DATED: November 6, 2006.

Stoel Rives LLP

By: 
LEE N. SMITH
Attorneys for Petitioners
Darrell D. & Cheri R. Mann

**APPENDIX A TO
PETITION FOR REVIEW**



California Regional Water Quality Control Board

Central Valley Region

Robert Schneider, Chair



Linda S. Adams
Secretary for
Environmental
Protection

Fresno Branch Office
Internet Address: <http://www.waterboards.ca.gov/rwqcb5>
1685 E Street, Fresno, California 93706-2020
Phone (559) 445-5116 • FAX (559) 445-5910

Arnold Schwarzenegger
Governor

5 October 2006

5T10000734

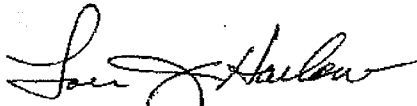
Darrell D. & Cheri R. Mann
10207 Crandon Park Dr.
Bakersfield, CA 93312

Dilley Family Trust
Lyle N. Dilley, Trustee
P. O. Box 4
Shaver Lake, CA 93664

CALIFORNIA WATER CODE SECTIONS 13304 AND 13267 ORDER, UNDERGROUND STORAGE TANK, SHAVER LAKE FOOD MART, 41801 TOLLHOUSE ROAD, SHAVER LAKE, FRESNO COUNTY

Enclosed is an Order issued pursuant to California Water Code Sections 13267 and 13304 for the completion of a water supply well survey, additional site assessment, public participation activities, feasibility study, remediation, groundwater monitoring, and submittal of technical and monitoring reports with respect to these activities at the site.

If you have any questions about the technical aspects of the situation, please contact Warren Gross at (559) 445-5128. In addition, please contact Warren Gross at least 72 hours in advance of all significant field work to facilitate regulatory oversight.


for PAMELA C. CREEDON
Executive Officer

Enclosure: Order No. R5-2006-0705, with 3 attachments

- c: Barbara Rempel, State Water Resources Control Board, UST Cleanup Fund, Sacramento
- Jim Armstrong, Fresno County Environmental Health System, Fresno
- Bill Lyman, Shaver Lake Heights Mutual Water Company, Shaver Lake
- Jim Garcia, Shaver Lake Hardware & Gift, Shaver Lake
- Bill Dale, Shaver Lake Heights Water Company, Fresno
- Rochelle Sargentini, Bob's shaver Lake Market, Shaver Lake
- Laraine Martin, Shaver Lake
- John Olsen, Monterey
- Lee Smith, Stoel Rives, LLC, Sacramento
- John Minney, Madera Ranchos

File: UST/Fresno Co./Shaver Lake Food Mart/5T10000734

R:\Reg\UGT\Projects\WWG files\Fresno County\Shaver Lake Food Mart\CAO\CAO cvr.DOC

California Environmental Protection Agency

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

CLEANUP AND ABATEMENT ORDER NO. R5-2006-0705
FOR
DARRELL D. MANN, CHERI R. MANN, AND THE DILLEY FAMILY TRUST
SHAVER LAKE FOOD MART, 41801 TOLLHOUSE ROAD
FRESNO COUNTY

This Order is issued to Darrell D. Mann, Cheri R. Mann, and The Dilley Family Trust (Lyle N. Dilley, Trustee), hereafter collectively referred to as Dischargers, based on provisions of California Water Code Section 13304, which authorizes the California Regional Water Quality Control Board, Central Valley Region (hereafter Regional Water Board) to issue a Cleanup and Abatement Order (Order), and Water Code section 13267, which authorizes the Regional Water Board to require preparation and submittal of technical and monitoring reports..

The Executive Officer finds, with respect to the Dischargers' acts or failure to act, the following:

PROPERTY OWNERSHIP AND OPERATIONS

1. According to Fresno County Recorder's records, since (or since some time prior to) 8 August 1983 Darrell D. Mann, Cheri R. Mann, and Lyle N. Dilley owned the commercial gasoline station known as Shaver Lake Food Mart at 41801 Tollhouse Rd., Shaver Lake, which is further identified as Fresno County Assessor's Parcel Number 120-249-10 (hereafter, Site), as shown in Attachment 1, which is made part of this Order. According to Fresno County Recorder's records, on or before 29 September 1997 Lyle N. Dilley transferred his interest in the Site to the Dilley Family Trust (Lyle N. Dilley, Trustee). During underground storage tank (UST) removal activities in September 1999, petroleum products were identified in Site soil and subsequent assessment determined that the petroleum hydrocarbon impact extended to groundwater beneath the Site. Dischargers are subject to this Order because they owned the property at the time the UST system had an unauthorized release of petroleum hydrocarbons and currently own the property and have thus caused or permitted waste to be discharged or deposited where it discharged to waters of the State and creates or threatens to create a condition of pollution or nuisance.
2. Darrell D. Mann has operated the Site UST systems since prior to 1 January 1990 and, according to Fresno County Community Health Department records, is the current operator of the UST system installed at the Site. In addition to ownership, he is subject to this Order due to his operation of the UST system at the time of the discovery of an unauthorized release of petroleum hydrocarbons from the UST system. He, as operator, has thus caused or permitted waste to be discharged or deposited where it discharged to waters of the State and creates or threatens to create a condition of pollution or nuisance.

BACKGROUND

3. The Site has been a commercial gasoline station from at least 1983 to the present. Four USTs and associated piping were removed from the Site in September 1999. Analysis of

DARREL D. MANN, et al.

SHAVER LAKE FOOD MART, FRESNO COUNTY

soil samples collected beneath the USTs, piping, and dispenser locations identified total petroleum hydrocarbons as gasoline (TPHg) concentrations up to 6,200 milligrams per kilogram (mg/kg, equivalent to parts per million, by weight); benzene, toluene, ethyl benzene, and xylenes (BTEX) concentrations of up to 16, 480, 100, and 570 mg/kg, respectively; and methyl tertiary-butyl ether (MTBE) concentrations up to 2.5 mg/kg. A double-wall steel/fiberglass UST and double-wall piping were installed to replace the old fueling facilities. Subsequent assessment further defined the limits of petroleum hydrocarbons in soil and identified the presence of petroleum hydrocarbons in groundwater. The analysis of groundwater samples from Site monitoring wells has identified TPHg concentrations up to 160,000 micrograms per liter (ug/L, equivalent to parts per billion), BTEX concentrations up to 8,200; 53,000; 3,300; and 19,000 ug/L, respectively; MTBE, tertiary-butyl alcohol (TBA), and tertiary-amyl methyl ether (TAME) concentrations up to 1,600, 710, and 6.3 ug/L, respectively; and ethylene dibromide concentrations up to 55 ug/L. Numerous water supply wells are near the Site and have been impacted by petroleum hydrocarbons that have, as of this writing, been attributed to petroleum hydrocarbons that migrated from the Site. MTBE concentrations up to 2.8 ug/L have been detected in a community water supply well (DW-5, 7 September 2004). A private well supplying residences and businesses (DW-4) has been impacted with TPHg concentrations up to 65 ug/L, benzene concentrations up to 6.6 ug/L, MTBE concentrations up to 130 ug/L, and 1,2-dichloroethane concentrations up to 1.1 ug/L (23 December 2004). Dischargers provided wellhead treatment for Well DW-4, but have not covered the expense of on-going maintenance and sampling. An unused private well approximately 800 feet downgradient of the Site (DW-10) has shown MTBE concentrations up to 12 ug/L (1 December 2005 and 25 May 2006).

4. A private water supply well (DW-2, 41782 Dorabella Road) adjacent the Site (although hydraulically upgradient with respect to typical groundwater flow) was sampled on 10 April 2006 by the well owner and TPHg, benzene, and MTBE concentrations of 5,500; 170; and 40 ug/L, respectively, (among other gasoline constituents) were reported. The well was sampled in response to strong gasoline odors observed in the water supply following a very intense rainstorm on 8 April 2006. The well owner reported that the gasoline odors were substantially diminished, through purging of well and water system, before the initial water sample was taken and subsequent samples have documented continued reductions in petroleum hydrocarbon concentrations within the well. A water sample collected by Regional Water Board staff on 25 May 2006 contained TPHg and benzene concentrations of 990 and 36 ug/L, respectively (among other gasoline constituents). The well owner installed a wellhead treatment system to restore potability and continue use of the water supply well.
5. Corrective action at the Site has not progressed since Dischargers' submittal on 19 February 2005 of a 30 November 2004 workplan, a 6 January 2005 revised workplan, and a 19 February addendum to the revised workplan. Execution of the workplan, approved by Regional Water Board staff 1 March 2005, was to include additional Site soil investigation, installation of soil vapor extraction (SVE) and air sparge (AS) wells, SVE/AS pilot testing, installation of additional downgradient groundwater monitoring wells, and submittal of a technical report with recommendations for further corrective action by 1 July 2005. The workplan has not been executed. Regional Water Board staff requested that Dischargers

DARREL D. MANN, et al.

SHAVER LAKE FOOD MART, FRESNO COUNTY

submit quarterly groundwater monitoring reports by letter dated 4 October 2004. Dischargers completed groundwater monitoring in September and December 2004 only. Water supply wells were sampled in June 2004. Regional Water Board staff completed selective sampling of water supply wells on 4 and 23 June 2004, 26 May 2005, 7 July 2005, 1 December 2005, and 25 May 2006.

6. Regional Water Board staff notified Dischargers of necessary corrective action in letters dated 4 October 2004, 8 December 2004, and 7 March 2005. In addition, the Executive Officer issued an order dated 28 April 2004 under the authority of Section 13267 of the California Water Code.

AUTHORITY – LEGAL REQUIREMENTS

7. Section 13304(a) of the California Water Code provides that:

“Any person who has discharged or discharges waste into waters of the state in violation of any waste discharge requirements or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including but not limited to, overseeing cleanup and abatement efforts. A cleanup and abatement order issued by the state board or a regional board may require the provision of, or payment for, uninterrupted replacement water service, which may include wellhead treatment, to each affected public water supplier or private well owner. Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at the request of the regional board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant.”

8. Section 13304(f) of the California Water Code provides that:

“Replacement water provided pursuant to subdivision (a) shall meet all applicable federal, state and local drinking water standards and shall have comparable quality to that pumped by the public water system or private well owner prior to the discharge of waste”

9. Section 13267(b)(1) of the California Water Code provides that:

“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, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of 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."

10. Section 13304(c)(1) of the California Water Code provides that:

"... the person or persons who discharged the waste, discharges the waste, or threatened to cause or permit the discharge of the waste within the meaning of subdivision (a), are liable to that government agency to the extent of the reasonable costs actually incurred in cleaning up the waste, abating the effects of the waste, supervising cleanup or abatement activities, or taking other remedial actions. . ."

11. The State Water Resources Control Board (hereafter State Water Board) has adopted Resolution No. 92-49, the *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304*. This Policy sets forth the policies and procedures to be used during an investigation or cleanup of a polluted site and requires that cleanup levels be consistent with State Water Board Resolution 68-16, the *Statement of Policy With Respect to Maintaining High Quality of Waters in California*. Resolution 92-49 and the Basin Plan establish the cleanup levels to be achieved. Resolution 92-49 requires the waste to be cleaned up to background, or if that is not reasonable, to an alternative level that is the most stringent level that is economically and technologically feasible in accordance with Title 23, California Code of Regulations (CCR) Section 2550.4. Any alternative cleanup level to background must (1) be consistent with the maximum benefit to the people of the state; (2) not unreasonably affect present and anticipated beneficial use of such water; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Water Board.

12. Chapter IV of the Basin Plan contains the *Policy for Investigation and Cleanup of Contaminated Sites*, which describes the Regional Water Board's policy for managing contaminated sites. This policy is based on Water Code Sections 13000 and 13304, the Title 27, Division 2, Subdivision 1 regulations, and State Water Board Resolution Nos. 68-16 and 92-49. The policy includes site investigation, source removal or containment, information required to be submitted for consideration in establishing cleanup levels, and the bases for establishment of soil and groundwater cleanup levels.

13. The State Water Board adopted the Water Quality Enforcement Policy, which states in part: "At a minimum, cleanup levels must be sufficiently stringent to fully support beneficial uses, unless the RWQCB allows a containment zone. In the interim, and if restoration of background water quality cannot be achieved, the CAO should require the discharger(s) to abate the effects of the discharge. Abatement activities may include the provision of alternate water supplies." (Enforcement Policy, p. 19.)

DARREL D. MANN, et al.

SHAVER LAKE FOOD MART, FRESNO COUNTY

14. The Water Board's *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, 4th Edition* (hereafter Basin Plan) designates beneficial uses of the waters of the State, establishes water quality objectives (WQOs) to protect these uses, and establishes implementation policies to implement WQOs. The designated beneficial uses of the groundwater beneath the Site are domestic, municipal, industrial, and agricultural supply.
15. Monitoring conducted by the Dischargers and Regional Water Board staff has identified constituents not present in naturally occurring background groundwater that are present in and have degraded the groundwater due to the discharge resulting from an unauthorized release of gasoline. All of these constituents are wastes as defined in California Water Code Section 13050(d). Consistent with Water Code section 13263 and the Basin Plan, the Regional Water Board establishes numerical limitations in its orders to implement applicable WQOs. Investigation, cleanup, and/or abatement of these wastes must be addressed to the satisfaction of the Regional Water Board pursuant to Resolution 92-49.
16. The Basin Plan contains numerical WQOs that apply to surface water and groundwater, including, for example, drinking water maximum contaminant levels (MCLs) promulgated in Title 22, California Code of Regulations, Division 4, Chapter 15 (hereafter Title 22) that the Basin Plan applies directly to waters designated as a municipal and domestic water supply. Waste constituents released by the discharge for which there is a numerical WQOs are as follows:

Constituent	Limits*	WQO	Reference
Benzene	1	Chemical	Primary MCL, Title 22
1,2 Dichloroethane	0.5	Chemical	Primary MCL, Title 22
Toluene	150	Chemical	Primary MCL, Title 22
MTBE	13 5	Chemical	Primary MCL, Title 22 Secondary MCL, Title 22
Ethylbenzene	300	Chemical	Primary MCL, Title 22
Xylene	1750	Chemical	Primary MCL, Title 22

* In micrograms per liter ($\mu\text{g/L}$)

17. The concentrations in groundwater (Finding 3) of the waste constituents listed in Finding 16, above, exceed the numerical WQOs for the constituents and have unreasonably affected individual and municipal domestic water supply wells (Finding 3). As the Dischargers have caused or contributed to an exceedance of numerical WQOs and caused an adverse effect on water supply wells, it has created and threatens to continue to create a condition of pollution, as defined in California Water Code Section 13050(l)(1).
18. The Basin Plan contains narrative WQOs that apply to both surface and groundwater for tastes and odors, toxicity, and chemical constituents. The taste and odor WQO requires, in part, that groundwater and surface water not contain substances in concentrations that cause nuisance, adversely affect beneficial uses, or impart undesirable tastes and odors to municipal and domestic water supplies. The toxicity WQO requires, in part, that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in humans. The chemical constituent WQO requires, in part, that groundwater not contain chemical constituents in concentrations that adversely

affect any beneficial use. Chapter IV of the Basin Plan contains the *Policy for Application of Water Quality Objectives*, (WQO Policy) which provides that “[w]here compliance with narrative objectives is required (i.e., where the objectives are applicable to protect specified beneficial uses), the Regional Water Board will, on a case-by-case basis, adopt numerical limitations in orders which will implement the narrative objectives.” Compliance with narrative WQO requires a site-specific evaluation of each waste constituent as set forth in the Basin Plan WQO Policy. This requires the consideration of, among other things, relevant numerical criteria and guidelines developed or published by other agencies and organizations. Such numerical criteria and guidelines relevant to the waste constituents described in Finding 3 include the following:

Constituent	Limits*	WQO	Reference
TPH as Gasoline	5	Taste and Odor	(1) McKee & Wolf, <i>Water Quality Criteria</i> , SWRCB, p. 230 (2) USEPA Drinking Water Health Advisory
Toluene	42	Taste and Odor	Federal Register, Vol. 54, No. 97
Ethylbenzene	29	Taste and Odor	Federal Register, Vol. 54, No. 97
Xylene	17	Taste and Odor	Federal Register, Vol. 54, No. 97
TBA	12	Toxicity	Ca State Action Level for Drinking Water (Department of Health Services)
Benzene	0.15	Toxicity	California Public Health Goal (OEHHA)

* In micrograms per liter (µg/L)

19. Consistent with the WQO Policy, the limits for the waste constituents listed in Finding 18, above, are relevant and appropriate to use to evaluate compliance with the narrative WQOs for taste and odor, chemical constituents, and toxicity. As described in Finding 3, concentrations of waste constituents in groundwater significantly exceed the limits set forth in Finding 18, and, therefore, the Dischargers have caused a violation of the narrative taste and odor and toxicity WQOs and has created, and threatens to continue to create, a condition of pollution.
20. The waste constituents listed in Findings 16 and 18 are present in groundwater, are injurious to health or impart objectionable taste and odor to drinking water supplies, and affect a considerable number of persons or a neighborhood. Thus, the Dischargers have created and/or has threatened to create a condition of nuisance, as defined in California Water Code Section 13050(m).
21. This Order requires the Dischargers to cleanup the waste consistent with State Water Board Resolution 92-49. This Order requires the Dischargers to submit a feasibility study report that evaluates the feasibility of cleanup to background and other levels consistent with Resolution 92-49, if the Dischargers demonstrate that cleanup to background is not reasonable. The Regional Water Board will consider information with respect to compliance with numeric and narrative WQOs for the waste constituents, the impacts to the beneficial uses of waters of the State, and all material and relevant information submitted by the Dischargers under this Order, to establish numerical cleanup levels for waste constituents consistent with State Water Board Resolution 92-49 and will revise this Order to include appropriate cleanup levels.

DISCHARGER LIABILITY

22. As described in Findings 1 and 2, Dischargers are subject to an order pursuant to Water Code section 13304 because the Dischargers have caused or permitted waste to be discharged or deposited where it has discharged to waters of the State and has created, and continues to threaten to create, a condition of pollution or nuisance. The condition of pollution is a priority violation and issuance or adoption of a cleanup or abatement order pursuant to Water Code Section 13304 is appropriate and consistent with policies of the Regional Water Board.
23. This Order requires investigation and cleanup of the Site in compliance with the Water Code, the applicable Basin Plan, Resolution 92-49, and other applicable plans, policies, and regulations.
24. As described in Finding 9, Dischargers are subject to an order pursuant to Water Code section 13267 to submit technical reports because existing data and information about the Site indicate that waste has been discharged, is discharging, or is suspected of discharging, at the property, which is or was owned and/or operated by the Dischargers named in this Order. The technical reports required by this Order are necessary to assure compliance with Section 13304 of the California Water Code, including to adequately investigate and cleanup the Site to protect the beneficial uses of waters of the state, to protect against nuisance, and to protect human health and the environment.
25. If the Dischargers fail to comply with this Order, the Executive Officer may request the Attorney General to petition the superior court for the issuance of an injunction.
26. If the Dischargers violate this Order, the Dischargers may be liable civilly in a monetary amount provided by the Water Code.
27. The issuance of this Order is an enforcement action taken by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.), pursuant to Title 14 CCR Section 15321(a)(2). The implementation of this Order is also an action to assure the restoration of the environment and is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.), in accordance with Title 14 CCR, Sections 15308 and 15330.
28. Any person affected by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Title 23 CCR Sections 2050-2068. The regulations may be provided upon request and are available at www.swrcb.ca.gov. The State Water Board must receive the petition within 30 days of the date of this Order.

REQUIRED ACTIONS

IT IS HEREBY ORDERED that, pursuant to California Water Code Sections 13304 and 13267, Darrell D. Mann, Cheri R. Mann, and The Dilley Family Trust shall:

1. Investigate the discharges of waste, clean up the waste, and abate the effects of the waste, forthwith, resulting from activities at the Shaver Lake Food Mart, 41801 Tollhouse Rd., Shaver Lake, Fresno County, CA, in conformance with State Water Board Resolution No. 92-49 *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304* and with the Regional Water Board's *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins* (in particular the Policies and Plans listed within the Control Action Considerations portion of Chapter IV). "Forthwith" means as soon as is reasonably possible. Compliance with this requirement shall include, but not be limited to, completing the tasks listed below. All work and reports shall follow the *Appendix A - Reports, Tri-Regional Recommendations for Preliminary Investigation and Evaluation of Underground Storage Tank Sites (Appendix A - Reports)* which is attached and made a part of this Order, and under permits required by State, County, and/or Local agencies.

WATER SUPPLY WELL SURVEY

2. By **30 November 2006**, submit the results of a water supply well survey within 1,000 feet of the Site and a sampling plan to sample any water supply well(s) threatened to be polluted by waste originating from the Site. The sampling plan shall include specific actions and a commitment by the Dischargers to implement the sampling plan, including obtaining any necessary agreements.
3. Within **30 days** of Regional Water Board staff concurrence with the water supply well sampling plan, but no later than **15 January 2007**, implement the sampling plan and submit the initial results in accordance with the approved time schedule, which shall become part of this Order.
4. Within **10 days** of Regional Water Board staff written notification that an alternate water supply shall be provided due to pollution impacts from the Site, submit a workplan and schedule for provision of, or payment for, uninterrupted replacement water service, which may include wellhead treatment, to each affected public water supplier or private well owner. In addition, when directed by the Regional Water Board in writing, provide bottled water as a temporary supply to impacted parties within 48 hours. The Dischargers shall implement the workplan in accordance with an approved time schedule, which shall become part of this Order.

SITE ASSESSMENT

5. By **15 January 2007**, submit a *Site Investigation Workplan (SIW)* to collect a sufficient number of soil, soil vapor, and groundwater samples to determine the lateral and vertical extent of waste constituents, including (at a minimum) all constituents listed in Finding 16,

and complete the site characterization. The workplan shall contain the information specified for a SIW in Attachment 2. Consider the applicable elements of the 30 November 2005 workplan (Finding Paragraph No. 5) as a starting point, and include additional assessment as necessary to meet the objectives of this paragraph. Include steps necessary to reasonably establish whether the pollution in the water supply well at 41782 Dorabella Road (Finding 4) resulted from petroleum hydrocarbons from the Site. With respect to Tetraethyl lead (TEL), the Dischargers shall analyze samples using a test method with the lowest commercially available practical quantitation limit. If TEL is not identified in soil, groundwater, or soil vapor within or adjacent the source area on Site, then further TEL analyses are not required.

6. Within **30 days** of staff concurrence with the SIW, but no later than **28 February 2007**, implement the workplan in accordance with the approved time schedule, which shall become part of this Order.
7. Submit a *Preliminary Investigation and Evaluation Report (PIER)* for groundwater in accordance with the approved time schedule, but no later than **28 May 2007**. The PIER shall contain the information specified for a PIER in Attachment 2 and include recommendations and a workplan for additional investigation, if needed. The workplan for additional investigation shall contain information specified for a SIW in Attachment 2, including a sufficient number of sampling points and wells to determine the vertical and lateral extent of pollutants. If no additional investigation is needed, this shall be the *Final Investigation and Evaluation Report (FIER)*.
8. Within **30 days** of staff concurrence with the workplan for additional site assessment, and in accordance with the approved time schedule, implement the workplan.
9. Upon defining the extent of wastes, but no later than **3 September 2007**, submit a *Problem Assessment Report (PAR)* that includes information from the implementation of the Workplan and sufficient detail on the nature and extent of the release to provide a basis for future decisions regarding subsequent cleanup and abatement actions. The PAR shall contain the information specified for a PAR in Attachment 2.

PUBLIC PARTICIPATION

10. By **15 December 2007**, to facilitate the Regional Water Board's duty to notify landowners of property where constituents from a UST release are present and to provide opportunity for public comment on the site cleanup process, conduct an Off-Site Property Owner Survey (Survey). Conduct the Survey by obtaining the property owner names and mailing addresses, the mailing addresses of all business and residences on the properties, and assessors' parcel numbers for all properties overlying soil and groundwater where constituents from the UST release are present and all properties adjacent to parcels where constituents from the release are present. Submit the data in a table or spreadsheet. Include assessor's parcel maps for the properties and a map depicting the extent of impacted groundwater.

FEASIBILITY STUDY

11. By **1 October 2007**, submit a Feasibility Study (FS) that provides a summary of remedial alternatives evaluated to address applicable cleanup levels for the affected or threatened human health and/or waters of the State. The Feasibility Study shall propose at least two remedial technologies that have a substantial likelihood to achieve cleanup of all impacted soils and groundwater and shall include a schedule for achieving cleanup. The remedial technologies must be evaluated with respect to their ability to be implemented, cost, and effectiveness. The Feasibility Study shall include the rationale for selecting the preferred remedial alternative. The Dischargers shall attempt to clean up each constituent to background concentrations, or to the lowest level that is technically and economically achievable and which complies with all applicable WQOs of the Basin Plan and promulgated water quality criteria.

REMEDIATION

12. Within **60 days** of Regional Water Board staff concurrence with the proposed remedial action described in the Feasibility Study, but no later than **1 December 2007**, submit a Final Remedial Plan (FRP). The FRP must include a detailed description of the remedial actions to address cleanup of the entire groundwater plume and source area soils. The FRP shall also include a schedule to implement all remedial action. The implementation schedule shall be part of a future order for this Site.

GROUNDWATER MONITORING

13. Conduct monitoring of the existing wells and any additional wells in accordance with Monitoring and Reporting Program Number R5-2006-0705 (MRP), issued by the Executive Officer and attached to this Order, as well as any amendments to the MRP issued by the Executive Officer.

GENERAL REQUIREMENTS

14. As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, have appropriate reports prepared by, or under the supervision of, a registered professional engineer or geologist and signed by the registered professional. All technical reports submitted by the Dischargers shall include a cover letter signed by the Dischargers, or an authorized representative, certifying under penalty of law that the signer has examined and is familiar with the report and that to their knowledge, the report is true, complete, and accurate. The Dischargers shall also state if they agree with any recommendations/proposals and whether they approved implementation of said proposals.
15. Upon startup of any remediation system(s), operate the remediation system(s) continuously, except for periodic and required maintenance or unpreventable equipment failure. The Dischargers shall notify the Water Board within 24 hours of any unscheduled shutdown of the remediation system(s) that lasts longer than 48 hours. This notification

shall include the cause of the shutdown and the corrective action taken (or proposed to be taken) to restart the system. Any interruptions in the operation of the remediation system(s), other than for maintenance, emergencies, or equipment failure, without prior approval from Water Board staff or without notifying the Water Board within the specified time is a violation of this Order. Within 7 working days of a shutdown, the Dischargers shall submit a Technical Report containing at a minimum, but not limited to the following information:

- a. times and dates equipment were not working,
 - b. cause of shutdown,
 - c. if not already restarted, a time schedule for restarting the equipment, and,
 - d. a Cleanup Assurance Plan to ensure that similar shutdowns do not reoccur.
- Proposed Cleanup Assurance Plans are to be completed within 30 days of the system shutdown.

16. Notify Regional Water Board staff at least three working days prior to any onsite work, testing, or sampling that pertains to environmental remediation and investigation and is not routine monitoring, maintenance, or inspection.
17. Obtain all local and state permits and access agreements necessary to fulfill the requirements of this Order prior to beginning the work.
18. Continue any remediation or monitoring activities until such time as the Executive Officer determines that sufficient cleanup has been accomplished to fully comply with this Order and this Order has been either amended or rescinded in writing.
19. Optimize remedial systems as needed to improve system efficiency, operating time, and/or waste removal rates, and report on the effectiveness of the optimization in the quarterly reports.
20. Maintain a sufficient number of monitoring wells to completely define and encompass the waste plume(s). If groundwater monitoring indicates the waste in groundwater has migrated beyond laterally or vertically defined limits during the quarter, then the quarterly monitoring reports must include a work plan and schedule, with work to begin within thirty days of Water Board staff approval, to define the new plume limits.
21. Submit electronic copies of all reports and analytical results over the Internet to the State Water Board Geographic Environmental Information Management System database (GeoTracker) at <http://geotracker.swrcb.ca.gov>. Electronic submittals shall comply with GeoTracker standards and procedures as specified on the State Board's web site.

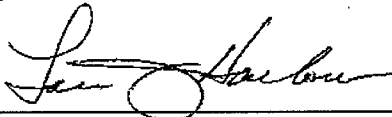
If the Dischargers are unable to perform any activity or submit any document in compliance with the schedule set forth herein, or in compliance with any work schedule submitted pursuant to this Order and approved by the Executive Officer, the Dischargers may request, in writing, an extension of the time specified. The extension request shall include justification for the delay. Any extension request shall be submitted as soon as the situation is recognized and no later than the compliance date. An extension may be granted by revision of this Order or by

a letter from the Executive Officer. Extension requests not approved in writing by the Executive Officer with reference to this Order are denied.

All work and directives referenced in this Order are required regardless of whether or not the UST Cleanup Fund approves the work for reimbursement.

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 or may issue a complaint for administrative civil liability.

This Order is effective upon the date of signature.



for PAMELA C. CREEDON, Executive Officer
10-5-2006

(Date)

Attachment 1: Site Location

Attachment 2: *Appendix A: Tri-Regional Board Staff Recommendations for Preliminary Investigation and Evaluation of Underground Tank sites, 16 April 2004*

Attachment 3: Monitoring and Reporting Plan

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2006-0705
FOR

DARRELL D. MANN, CHERI R. MANN, AND THE DILLEY FAMILY TRUST
SHAVER LAKE FOOD MART, 41801 TOLLHOUSE ROAD
FRESNO COUNTY

Shaver Lake Food Mart (hereafter, site) is an operating retail gasoline station at 41801 Tollhouse Road, Shaver Lake, Fresno County. Darrell D. Mann, Cheri R. Mann, and The Dilley Family Trust, Lyle N Dilley, Trustee (hereafter, Dischargers) owned and/or operated this property at a time when the site's former underground storage tank (UST) system caused or permitted waste to be discharged to waters of the state that impaired the beneficial uses of this water resource. Dischargers currently own the site and Darrell D. Mann operates the site UST system, consisting of one 20,000-gallon split tank and one dispenser island. Darrell D. Mann also operated the former UST system at the site, which caused or permitted waste to be discharged to waters of the state at some unknown point in time.

Soil and groundwater (groundwater depth has been measured from 7 to 14 feet below ground surface [bgs]) has been impacted by petroleum hydrocarbons from the release of gasoline from site fueling facilities prior to their 1999 replacement. The unauthorized release/s that occurred from the site's former UST system has impacted both soil and groundwater with gasoline related constituents, additives, and oxygenates. A partial site assessment has been completed. No cleanup has been implemented to date. Petroleum hydrocarbon constituents persist in groundwater beneath the site in concentrations that exceed the numerical limits selected to implement the Water Quality Objective's listed in the Basin Plan.

This Monitoring and Reporting Program (MRP) is issued pursuant to Section 13267 of the California Water Code and is necessary to delineate groundwater pollutant plumes and determine whether remediation efforts are effective. Existing data and information about the site show the presence of various chemicals, including gasoline related constituents, additives, and oxygenates, emanating from the property under the control of the Dischargers. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

Prior to construction of any new groundwater monitoring or extraction wells, and prior to destruction of any groundwater monitoring or extraction wells, the Dischargers shall submit plans and specifications to the California Regional Water Quality Control Board, Central Valley Region (hereinafter Regional Water Board) for review and approval. Once installed, all new wells shall be added to the monitoring program and shall be sampled and analyzed according to the schedule below.

GROUNDWATER MONITORING

As shown on Figure 1, there are four groundwater monitoring wells, designated MW-1 through MW-4. The groundwater monitoring program for the four monitoring wells, and any wells installed subsequent to the issuance of this MRP, shall follow the schedule below. If sampling requirements for elimination of constituents have been met under the previous MRP, the Dischargers are not required to sample for those constituents again based on the new requirements. Monitoring wells with free phase petroleum product or visible sheen shall be monitored, at a minimum, for product thickness and depth to water. The volume of extracted groundwater also shall be provided in quarterly monitoring reports. Sample collection and analysis shall follow standard EPA protocol.

All wells shall be monitored quarterly for water levels and the presence and thickness of free product. Wells without free product shall be sampled and the samples analyzed in accordance with the following table:

Constituents	EPA Analytical Method	Maximum Practical Quantitation Limit (µg/l) ¹	Sampling Frequency
Volatile Organic Compounds	8021 or 8260B	0.5	Quarterly
Total Petroleum Hydrocarbons	8015M	50	Quarterly
Benzene	8020 or 8260B	0.5	Quarterly
Toluene	8020 or 8260B	0.5	Quarterly
Ethylbenzene	8020 or 8260B	0.5	Quarterly
Xylene	8020 or 8260B	0.5	Quarterly
Dissolved Lead ²	7421	10	Quarterly
1,2-dichloroethane	8260B	0.5	Quarterly
ethylene dibromide	8260B	0.5	Quarterly
MTBE ³	8260B	0.5	Quarterly
TBA ³	8260B	5	Quarterly
TAME ³	8260B	0.5	Quarterly
DIPE ³	8260B	0.5	Quarterly
ETBE ³	8260B	0.5	Quarterly
Ethanol ³	8260B	50	Quarterly
Methanol ³	8260B	100	Quarterly

¹ For nondetectable results. All concentrations between the Method Detection Limit and the Practical Quantitation Limit shall be reported as trace.

² If dissolved lead is detected, the Dischargers shall perform verification sampling within 30 days of submittal of the monitoring report. If lead pollution is verified, the Dischargers shall continue quarterly monitoring for dissolved lead. If the presence of dissolved lead is not confirmed, no further test is required.

³ Fuel oxygenates, including MTBE, methanol, ethanol, tertiary butyl alcohol (TBA), tertiary amyl methyl ether (TAME), di-isopropyl ether (DIPE), and ethyl tertiary butyl ether (ETBE) shall be analyzed in all monitoring wells during two monitoring events in the first and third quarters. If results are nondetectable for fuel oxygenates for both sampling events, no further monitoring for oxygenates is required in that well. If a fuel oxygenate is detected, it shall be added to the quarterly monitoring program for the well in which it was detected.

REPORTING

When reporting the data, the Dischargers shall arrange the information in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner as to illustrate clearly the compliance with this Order. In addition, the Dischargers shall notify the Regional Water Board within 48 hours of any unscheduled shutdown of any soil vapor and/or groundwater extraction system.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all reports shall be prepared by a registered professional or their subordinate and signed by the registered professional.

The Dischargers shall submit quarterly electronic data reports, which conform to the requirements of the California Code of Regulations, Title 23, Division 3, Chapter 30. The quarterly reports shall be submitted electronically over the internet to the Geotracker database system by the 1st day of the second month following the end of each calendar quarter by **1 February, 1 May, 1 August, and 1 November** until such time as the Executive Officer determines that the reports are no longer necessary.

Quarterly reports shall be submitted to the Regional Water Board by the **1st day of the second month following the end of each calendar quarter (i.e., by 1 February, 1 May, 1 August, and 1 November)** until such time as the Executive Officer determines that the reports are no longer necessary. Each quarterly report shall include the following minimum information:

- (a) a description and discussion of the groundwater sampling event and results, including trends in the concentrations of pollutants and groundwater elevations in the wells, how and when samples were collected, and whether the pollutant plume(s) is delineated;
- (b) field logs that contain, at a minimum, water quality parameters measured before, during, and after purging, method of purging, depth of water, volume of water purged, etc.;
- (c) groundwater contour maps for all groundwater zones, if applicable;
- (d) isocontour pollutant concentration maps for all groundwater zones, if applicable;
- (e) a table showing well construction details such as well number, groundwater zone being monitored, coordinates (longitude and latitude), ground surface elevation, reference elevation, elevation of screen, elevation of bentonite, elevation of filter pack, and elevation of well bottom;
- (f) a table showing historical lateral and vertical (if applicable) flow directions and gradients;

- (g) cumulative data tables containing the water quality analytical results and depth to groundwater;
- (h) a copy of the laboratory analytical data report;
- (i) if applicable, the status of any ongoing remediation, including cumulative information on the mass of pollutant removed from the subsurface, system operating time, the effectiveness of the remediation system, and any field notes pertaining to the operation and maintenance of the system; and
- (j) if applicable, the reasons for and duration of all interruptions in the operation of any remediation system, and actions planned or taken to correct and prevent interruptions.

An Annual Report shall be submitted to the Regional Water Board by **1 February (1 November for semi-annual monitoring)** of each year. This report shall contain an evaluation of the effectiveness and progress of the investigation and remediation, and may be substituted for the fourth quarter (**or second semi-annual**) monitoring report. The Annual Report shall contain the following minimum information:

- (a) both tabular and graphical summaries of all data obtained during the year;
- (b) groundwater contour maps and pollutant concentration maps containing all data obtained during the previous year;
- (c) a discussion of the long-term trends in the concentrations of the pollutants in the groundwater monitoring wells;
- (d) an analysis of whether the pollutant plume is being captured by an extraction system or is continuing to spread;
- (e) a description of all remedial activities conducted during the year, an analysis of their effectiveness in removing the pollutants, and plans to improve remediation system effectiveness;
- (f) an identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program; and
- (g) if desired, a proposal and rationale for any revisions to the groundwater sampling plan frequency and/or list of analytes.

MONITORING AND REPORTING PROGRAM NO. R5-2006-0806
SHAVER LAKE FOOD MART
FRESNO COUNTY

- 5 -

The results of any monitoring done more frequently than required at the locations specified in the MRP also shall be reported to the Regional Water Board. The Dischargers shall implement the above monitoring program as of the date of the Order.

Ordered by:



for PAMELA C. CREEDON, Executive Officer

10-5-2006

(Date)

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION



APPENDIX A - REPORTS
TRI - REGIONAL BOARD STAFF
RECOMMENDATIONS
FOR PRELIMINARY INVESTIGATION AND
EVALUATION OF UNDERGROUND TANK SITES

16 April 2004

Prepared by Staff of the
Central Valley Regional Water Quality Control Board

Appendix A
Table of Contents

1.0 Introduction.....	1
1.1 Authority	1
1.2 Reference Documents	2
2.0 Reporting Recommendations and Legal Requirements.....	2
3.0 Investigation Process	3
3.1 Site Investigation Workplan (SIW)	3
3.2 Preliminary Investigation and	5
Evaluation Report (PIER).....	5
Table 1. Water Quality Limits for Petroleum Fuel	7
Mixtures, Constituents and Add (cont).....	8
Notes for Table 1	9
3.3 Quarterly Status Report	10
Table 2. Recommended Minimum Verification Analyses	11
For Underground Storage Tank Investigations.....	11
Explanation for Table 2	12
4.0 Corrective Action Plan (CAP)	14
4.1 Problem Assessment Report (PAR).....	14
4.2 Feasibility Study Report (FS)	15
Figure 1. A General Site Conceptual Model.....	16
4.3 Final Remediation Plan (FRP)	17
5.0 Verification Monitoring.....	17
6.0 No Further Action Required (NFAR) Reporting	17
6.1 NFAR Process.....	18
6.2 Case Evaluation	18
6.3 NFAR Criteria for Low Risk Vadose Zone Cases.....	19
6.4 NFAR for Cases Above Background Groundwater.....	19
6.5 NFAR for Cases Exceeding Water Quality Objectives	20
6.6 NFAR Documentation	21
Disclaimer	22
Acronyms Used in Appendix A	23
NFAR Checklist.....	24

APPENDIX A

CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

STAFF RECOMMENDATIONS FOR REPORTING

AT

SITES CONTAMINATED

BY

UNDERGROUND STORAGE TANK RELEASES

1.0 INTRODUCTION

Appendix A to the *Tri-Regional Board Staff Recommendations for Preliminary Investigation and Evaluation of Underground Storage Tank Sites* (Tri-Regional Recommendations) provides recommendations from Region 5 (Central Valley RWQCB) staff for reporting work for: site investigations, corrective actions, and no further action required documentation associated with leaking underground storage tank (UST) sites. Adherence to recommendations in Appendix A facilitates efficient regulatory review of investigations and cleanups at UST sites and assures compliance with UST Regulations found in CCR Title 23, Chapter 16.

Recommendations in Appendix A:

- Provide a format for consistency of documents;
- Reduce cost of reporting to dischargers and the UST Cleanup Fund by providing the dischargers and environmental consultants with information for developing complete workplans and reports.
- Complete the investigative phase in a timely, cost-effective and efficient manner; and
- Insure the appropriate remedial action is completed as quickly as possible.

1.1 Authority

The authority for Regional Board and Lead Agencies to direct UST investigations is found in the following:

- Porter-Cologne Water Quality Control Act (also known as the California Water Code Section 13000 ff.);
- The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley Region (Sacramento River Basin, San Joaquin River Basin and Tulare Lake Basin – current editions), which include beneficial use designations, water quality objectives and implementation plans (especially the *Policy for Investigation and Cleanup of Contaminated Sites*);
- State Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality Water in California;
- State Board Resolution No. 88-63, Sources of Drinking Water;
- State Board Resolution No. 92-49: Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304, as amended;

Classification System working under the direct supervision of one of the aforementioned professionals, provided that the professional reviews the logs and assumes responsibility for the accuracy and completeness of the logs. (See Section 2649 of Title 23, Division 3, Chapter 16 of the California Code of Regulations).

7. All monitoring wells, extraction wells, etc and exploratory boreholes are to follow local ordinances and the guidance and requirements of the DWR Bulletin 74-81 and 74-90, California Well Standards. The text for Bulletin 74-81 and 74-90 may be downloaded and printed from the DWR website at dwr.water.ca.gov, and click on the "publications" button.
8. Printed or electronic reports are to be submitted to both Regional Board and LIA agencies.
9. As of September 2001, dischargers are also to submit analytical and site data electronically to the State Water Resources Control Board (SWRCB) at the same time as the hard copy reports. For more information, please log on to the SWRCB web site at: <http://geotracker.swrcb.ca.gov> and click on the information link to "AB 2886". (See Sections 2729 and 2729.1 of Title 23, Division 3, Chapter 16 of the California Code of Regulations).
10. As of January 2002, in addition to the laboratory data, site specific information is required to be submitted electronically for the following: 1) the latitude and longitude of groundwater monitoring wells (including any other well or permanent sampling point designated as part of the site monitoring program) accurate to within one meter; 2) the surveyed elevation, relative to mean sea level, for any groundwater sampled, accurate to within a tenth of a foot; 3) groundwater information, including depth to water, free product presence/thickness and well status; and 4) a site map in electronic format showing property boundaries, buildings, and soil and water sampling locations. (See Sections

2729 and 2729.1 of Title 23, Division 3, Chapter 16 of the California Code of Regulations).

3.0 INVESTIGATION PROCESS

After notification of the unauthorized release to the LIA agency, the lead agency is determined and the investigation and reporting process initially begins with a Site Investigation Workplan to collect soil or soil and groundwater samples for analysis of potential contaminants. All workplans and reports prepared for investigation and remedial actions are to be submitted to both the LIA and the Regional Board. The lead agency will review the workplan and send a letter to the discharger listing conditions of approval, or requesting additional information prior to approval of the proposed workplan.

Responsible parties seeking reimbursement funding from the UST Cleanup Fund will also need to submit all workplans with regulatory approval letters to the UST Cleanup Fund for review and pre-approval of costs.

Note: The lack of funding by the UST Cleanup Fund does not relieve responsible parties from their responsibility to perform work required by the Regional Board or a local enforcement agency pursuant to the Water Code or the Health & Safety Code. Amended time schedules may be considered to accommodate funding constraints.

3.1 Site Investigation Workplan - §2654, §2723

Once a release of petroleum hydrocarbon to soil has been detected, soil problems that cannot be resolved by a "scoop and run" cleanup may remain to be further identified and remediated. To successfully achieve site cleanup, subsequent site investigations must define (to the non-detect limits) the lateral and vertical extent of impacted soil and groundwater. An initial Site Investigation Workplan is used to develop preliminary information to direct subsequent work.

Upon approval of the workplan by the lead agency to define the extent of impacted soil and groundwater, the discharger or their consultant must obtain the necessary permits from the LIA, and then

- Completing a Quality Assurance/ Quality Control plan including chain-of-custody procedures for field sampling and analysis.

- Quality Assurance/ Quality Control plan including chain-of-custody procedures for field sampling and analysis.

Specific to the groundwater investigation, the workplan is to include the following:

3.2 Preliminary Investigation and Evaluation Report (PIER) - \$2654, \$2723

- A proposal to complete a sensitive receptor survey to show water supply wells and surface water bodies within 2,000 feet of the site. With field observation and verification of any wells within 500 feet of the leaking underground storage tank site and attempting to obtain depth of annular seal for those wells.
- A rationale for installing monitoring wells including well location, total depths, screen intervals, and annular seal depth.
- A construction diagram for any proposed monitoring wells including the well diameter, casing and screen type, annular sealing method and depth.
- The drilling method to be implemented and decontamination procedures used between borings.
- The method of well development, and the criteria for selecting the proposed method.
- Disposal plans for soil and purge water.
- Plans for completing a location survey of the installed monitoring wells.
- Free product measurement method.
- Water level measurement procedure.
- Well purging procedure.
- Sample collection procedures.
- Analytical methods to be used and appropriate detection limits. (Analytical laboratories are to report all peaks identified from the soil and groundwater testing, and provide chromatograms as necessary).

The soil and groundwater data collected from implementing the Site Investigation Workplan is to be presented in the PIER and used to create the Site Conceptual Model. Information developed for this report will be used to determine what additional work is needed at the site. The PIER is to contain:

- Summarized background information developed from the Site Investigation Workplan and results of the completed sensitive receptor survey.
- The area of investigation is to be accurately delineated on maps and cross sections to scale to depict the lateral and vertical extent of impacted soil and groundwater identified to date.
- Cross sections must include stratigraphy based upon boreholes, trenches, monitoring wells, or any other supporting information, and must show analytical results and construction details for all monitoring wells to demonstrate the degree of impact to groundwater and site soils.
- Tables summarizing analytical data and methodologies used to collect and analyze the samples.
- Depth to groundwater, and calculated groundwater elevation.
- Groundwater quality contoured on a site map for each groundwater unit investigated.
- A graphical and narrative site conceptual model (SCM) showing the extent of known soil contamination and groundwater degradation relative to the leaking UST system and potential receptors. The SCM should be updated as characterization data becomes available, and used to make determinations for future investigations.

Table 1: Water Quality Numerical Limits for Petroleum Fuel Mixtures, Constituents and Additives *

Constituent	Water Quality Objective (a)	Numerical Limit Interpreting Water Quality Objective		
		Source	Limit	Units
Aromatic Hydrocarbons:				
Benzene	Chemical Constituents	California Primary MCL (b)	1.0	ug/L
	Toxicity	California Public Health Goal (OEHHA)	0.15	ug/L
	Tastes and Odors	Amoore and Hautala, <i>J. Applied Tox.</i> , Vol.3, No.6, 1983	170	ug/L
n-Butylbenzene	Toxicity	California Drinking Water Action Level (DHS)	280	ug/L
sec-Butylbenzene	Toxicity	California Drinking Water Action Level (DHS)	280	ug/L
tert-Butylbenzene	Toxicity	California Drinking Water Action Level (DHS)	280	ug/L
Ethylbenzene	Chemical Constituents	California Primary MCL (b)	300	ug/L
	Toxicity	California Public Health Goal (OEHHA)	300	ug/L
	Tastes and Odors	Federal Register, Vol. 54, No. 97, pp. 22138,22139	29	ug/L
Isopropyl benzene	Toxicity	USEPA IRIS Reference Dose (i)	700	ug/L
	Tastes and Odors	Amoore and Hautala, <i>J. Applied Tox.</i> , Vol.3, No.6, 1983	0.8	ug/L
Toluene	Chemical Constituents	California Primary MCL (b)	150	ug/L
	Toxicity	California Public Health Goal (OEHHA)	150	ug/L
	Tastes and Odors	Federal Register, Vol. 54, No. 97, pp. 22138,22139	42	ug/L
1,2,4-Trimethylbenzene	Toxicity	California Public Health Goal (OEHHA)	330	ug/L
1,3,5-Trimethylbenzene	Tastes and Odors	Amoore and Hautala, <i>J. Applied Tox.</i> , Vol.3, No.6, 1983	15	ug/L
	Toxicity	California Public Health Goal (OEHHA)	330	ug/L
Xylenes (sum of isomers)	Tastes and Odors	Amoore and Hautala, <i>J. Applied Tox.</i> , Vol.3, No.6, 1983	15	ug/L
	Chemical Constituents	California Primary MCL (b)	1750	ug/L
	Toxicity	California Public Health Goal (OEHHA)	1800	ug/L
	Tastes and Odors	Federal Register, Vol. 54, No. 97, pp. 22138,22139	17	ug/L
	Aliphatic Hydrocarbons:			
n-Hexane	Toxicity	USEPA Health Advisory (e)	400	ug/L
	Tastes and Odors	Amoore and Hautala, <i>J. Applied Tox.</i> , Vol.3, No.6, 1983	6.4	ug/L
Hydrocarbon Mixtures:				
Diesel or Kerosene	Toxicity	USEPA Superfund Provisional Reference Dose (f)	66-140	ug/L
	Tastes and Odors	Taste & odor threshold from USEPA Health Advisory	100	ug/L
Gasoline	Toxicity	USEPA Superfund Provisional Cancer Slope Factor (c)	21	ug/L
	Tastes and Odors	McKee & Wolf, <i>Water Quality Criteria</i> , SWRCB, p. 230	5	ug/L
Additives:				
Lead	Chemical Constituents	California Primary MCL (b)	15	ug/L
	Toxicity (h)	California Public Health Goal (OEHHA)	2	ug/L
Ethylene dibromide (EDB)	Chemical Constituents	California Primary MCL (b)	0.05	ug/L
	Toxicity	California Public Health Goal (OEHHA)	0.01	ug/L
Ethylene dichloride (1,2-Dichloroethane)	Chemical Constituents	California Primary MCL (b)	0.5	ug/L
	Toxicity	California Public Health Goal (OEHHA)	0.4	ug/L
	Tastes and Odors	Amoore and Hautala, <i>J. Applied Tox.</i> , Vol.3, No.6, 1983	7000	ug/L
Methyl t-butyl ether (MTBE)	Chemical Constituents	California Primary MCL (b)	13	ug/L
	Chemical Constituents	California Secondary MCL (f)	5	ug/L
	Toxicity	California Public Health Goal (OEHHA)	13	ug/L
	Tastes and Odors	California Secondary MCL	5	ug/L
Diisopropyl ether (DIPE)	Tastes and Odors	Amoore and Hautala, <i>J. Applied Tox.</i> , Vol.3, No.6, 1983	0.8	ug/L
t-Butyl alcohol (TBA)	Toxicity	California Drinking Water Action Level (DHS)	12	ug/L
	Tastes and Odors	Amoore and Hautala, <i>J. Applied Tox.</i> , Vol.3, No.6, 1983	290,000	ug/L
Ethanol	Tastes and Odors	Amoore and Hautala, <i>J. Applied Tox.</i> , Vol.3, No.6, 1983	760,000	ug/L
Methanol	Toxicity	USEPA IRIS Reference Dose (i)	3500	ug/L
	Tastes and Odors	Amoore and Hautala, <i>J. Applied Tox.</i> , Vol.3, No.6, 1983	740,000	ug/L

Notes for Table 1:

- (a) Water Quality Objectives for groundwater from the *Water Quality Control Plan (Basin Plan) for the Sacramento River Basin and the San Joaquin River Basin*, Fourth Edition. Similar language is found in the Tulare Lake Basin Plan.

Chemical Constituents

Ground waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses.

At a minimum, ground waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) specified in the following provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, and Tables 64449-A (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits) and 64449-B (Secondary Maximum Contaminant Levels-Ranges) of Section 64449. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. At a minimum, water designated for use as domestic or municipal supply (MUN) shall not contain lead in excess of 0.015 mg/l. To protect all beneficial uses, the Regional Water Board may apply limits more stringent than MCLs.

Toxicity

Ground waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life associated with designated beneficial use(s). This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances.

Tastes and Odors

Ground waters shall not contain taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.

- (b) Primary MCLs are human health based, but also may reflect other factors relating to technologic and economic feasibility of attainment and monitoring in a water distribution system and at the tap. These factors may not be relevant for the water resource.
- (c) 1-in-a-million cancer risk estimate derived from published oral cancer slope factor by assuming 2 liters/day water consumption and 70 kg body weight.
- (d) If adopted as proposed, this limit would become the numerical limit used to interpret this objective.
- (e) Health advisory = 4000 ug/L for 10 day exposure or less. No lifetime exposure advisory has been developed. However, lifetime health advisories are normally at least ten-fold lower than 10-day advisories. Therefore, a level of 400 ug/L would be a reasonable estimate of a lifetime protective level.
- (f) Secondary MCLs are human welfare based, but also may reflect other factors relating to technologic and economic feasibility of attainment and monitoring in a water distribution system and at the tap. These factors may not be relevant for the water resource.
- (g) Value listed is for 1,3,5-trimethylbenzene. Taste and odor threshold should be similar for 1,2,4-trimethylbenzene.
- (h) Liability under Proposition 65 may also exist for responsible parties where levels in water exceed 0.25 ug/L.
- (i) Listed value assumes 2 liters/day water consumption, 70 kg body weight, and 20% relative source contribution from drinking water.
- (j) Concentrations of individual PAHs are adjusted by dividing the concentrations by the potency equivalency factors (PEFAs) in the table on the following page. The limit applies to the sum of these adjusted concentrations.

- * For definitions of terms and acronyms used in Table 1, please see the staff report, *A Complication of Water Quality Goals*, available on the internet at http://www.swrcb.ca.gov/rwqcb5/available_documents/wq_goals pages 9 to 13.

**TABLE #2 RECOMMENDED MINIMUM VERIFICATION ANALYSES
FOR UNDERGROUND STORAGE TANK INVESTIGATIONS**

(See explanation on following page.)

Tank Contents (Carbon Range)	Gasoline by 8015M or 8260B	Diesel by 8015M	BTEX by 8021B or 8260B	VOCs by 8260B (1)	Semi-VOCs by 8270C (2)	Oil & Grease by 1664A	PCBs by 8082	Total Lead by 7421	Title 22 Metals (3)
Unknown Fuel (C4-C36)	X	X		X				X	
Gasoline (C4-C20)	X			X				X	
Diesel (C10-C36)		X	X	X					
Jet Fuel/Kerosene (C9-C20)		X	X						
Heating Oil (C10-C32)		X	X						
Standard Solvent (C8-C20) (Non-Chlorinated)		X		X					
Chlorinated Solvents				X	X				
Waste Oil or Unknown Contents	X	X		X	X	X	X	X	X

Notes:

- EPA Method 8260B analyses must include all analytes listed in the method plus fuel oxygenates methyl-tertiary-butyl ether (MTBE), diisopropyl ether (DIPE), ethyl-tertiary-butyl ether (ETBE), tertiary-aryl-methyl ether (TAME), tertiary-butanol (TBA), methanol and ethanol and fuel additives 1,2-dichloroethane (1,2-DCA) and ethylene dibromide (EDB or 1,2-dibromoethane).
- If pentachlorophenol (PCP) is identified, analyze the soil and/or water sample for dioxins and furans by EPA Method 8290 and pesticides by EPA Method 8081A.
- Method 6010B may be used for all but the following metals, for which individual AA methods are required: Antimony & Arsenic by 7062, Cadmium by 7131A, Lead by 7421, Mercury by 7471A, Nickel by 7521, Selenium by 7742, and Thallium by 7841.
- Non-proprietary, performance based analytical methods may be used with approval of Regional Board staff

10. PEAKS THAT DO NOT CONFORM to the standards must be reported by the laboratories, including any unknown complex mixtures that elute at times which vary from the standards. These mixtures may not compare to the standards and may not be readily identified; however, they are to be reported. At the discretion of the LIA or the Regional Board the following information is to be contained in the laboratory report:

- The relative retention time for the unknown peak(s) relative to the reference peak in the standard;
- Copies of the chromatogram(s);
- Type of column used;
- Initial temperature;
- Temperature program in degrees Celsius per minute; and
- Final temperature.

(i.e.) local water supply wells, buildings or utilities impacted or potentially threatened).

- A risk assessment will be necessary to demonstrate that the site poses no unacceptable risks to human health or the environment. The site-specific risk assessment must use the Office of Environmental Health Hazard (OEHHA) toxicity data (cancer slopes). This information may streamline the consideration of remedial alternatives and the timeline for implementation.
- Appropriate conclusions and recommendations for the next phase of work.
- An updated Site Conceptual Model illustrating site conditions showing the extent of known soil and groundwater impact relative to the leaking UST system and the relationship between contaminants and potential receptors. (See Figure 1 below for an example).

4.2 Feasibility Study (FS) Report

The FS Report provides a summary of remedial alternatives evaluated to address applicable cleanup levels for affected or threatened human health and/or waters of the State. The FS Report must include a cost evaluation for at least two remedial alternatives and a recommendation for the preferred remedial action. The FS should identify the preferred remedial technologies and may recommend pilot testing of the selected remedial technologies before full-scale design.

The FS Report is to include the following minimum information:

1. An evaluation of remedial alternatives that have a substantial likelihood to achieve cleanup of all impacted soils and/or soils and groundwater. At a minimum, two of the following technologies must be evaluated for implementability, cost and effectiveness, (other technologies not listed may also be evaluated):

- Excavation;
- Soil vapor extraction;
- Bioventing;
- Bioremediation (bio barriers);
- Groundwater extraction and treatment;
- Biosparging;
- In-situ oxidation;
- Dual-phase extraction and treatment and
- Monitored natural attenuation.

2. The rationale for selecting the preferred remedial alternative for restoring and protecting impacted or threatened waters.
3. A timeframe for achieving remedial goals.
4. A cost comparison for remedial alternatives evaluated.

With minimal investigation and explanation, some remedial alternatives may be eliminated as simply not feasible for the site. For instance, soil vapor extraction is practical in sandy soils but difficult to justify for tighter clay soils where excavation and landfill disposal may be more effective in meeting cleanup levels.

Note: If the proposed alternatives include either soil disposal to a landfill, groundwater discharge to the sanitary sewer, or venting vapor to the atmosphere, etc., the discharger must include assurances from each appropriate regulating agency that the proposed activity is acceptable and permissible.

5. Disposal methods requiring either the Regional Board's General Permit for discharge to surface water (NPDES) or land (WDRs) may be evaluated. Selection of this type of disposal requires the responsible party to submit an application and supporting documentation in a timely manner. (See Region 5 Web page).

4.3 Final Remediation Plan (FRP)

The FRP is a corrective action implementation plan with detailed plans of the approved remedial system to be installed, and a proposed schedule for system construction and startup.

The FRP is to include the following minimum information:

- A description of the remedial technology approved by the LIA and/or Regional Board.
- A listing of the approved cleanup levels from the PAR, and predicted timeframe to meet these cleanup levels using the selected remedial alternative.
- Detailed plans for installation of the approved remedial alternative, such as soil to be excavated, layout of the soil vapor extraction system, air sparge injection points, the number and placement of remedial wells and associated equipment, the proposed pumping rate, disposal of wastes, etc.
- A discussion of implementation, including a phased schedule for construction and system startup.
- Operation and maintenance procedures, tests, and schedules including startup, long-term monitoring program for influent and effluent concentrations and periodic evaluation of the need for system optimization.

Should delays occur or time extensions be needed, such requests, with supporting documentation, are to be submitted by letter to the LIA and/or Regional Board.

5.0 VERIFICATION MONITORING-\$2727

Verification monitoring includes all activities required to verify implementation of the CAP and evaluate its effectiveness. The discharger shall verify successful completion of the CAP through sampling or other monitoring of soil and/or groundwater for a period of time determined by the lead agency to demonstrate that seasonal groundwater fluctuations will not mobilize any remaining contamination in quantities sufficient to degrade water quality and that rebound of contaminant concentrations will be insignificant. Using the monitoring results obtained during this period, the discharger shall evaluate the effectiveness of corrective actions at the site.

6.0 NO FURTHER ACTION REQUIRED (NFAR) REPORTING

All regulatory agencies, including the Regional Board, are required to issue a standard Case NFAR letter when closure is appropriate. That letter is described in Section 25296.10(g) of the Health and Safety Code. The purpose for a NFAR report is to provide a document upon which the regulator may make an objective decision regarding a request by the responsible party for site NFAR when contaminants remain but are no longer considered to be a significant risk. (See Disclaimer, page 2). In general, Regional Board staff approve NFAR requests when risks to public health and safety and ecological receptors are reduced to insignificant levels and:

1. Groundwater quality/beneficial uses are not threatened by soil contamination, and chemical contaminants in groundwater have been remediated to non-detectable levels, or
2. Groundwater contains detectable contaminants below water quality objectives and concentrations are expected to reach background conditions through natural processes within a reasonable period of time, or
3. Groundwater contains contaminants above water quality objectives, where best avail-

6.3 NFAR Criteria for Low Risk Vadose Zone Cases

Vadose zone cases are those sites for which documentation has been provided to demonstrate that fuel hydrocarbons or additives have not reached and are not expected to reach groundwater. If site conditions do not meet the criteria below, then additional remediation may be required. All of the following must be demonstrated in order to designate a vadose zone site as "low risk".

1. The release has been stopped and the source of contamination has been removed or remediated. Soil that contains mobile constituents in concentrations that threaten to degrade water quality or result in a significant risk to human health and safety or the environment (as determined by site specific data, or as concluded using appropriate mathematical models) should be considered a source.
2. The site has been adequately characterized.
 - The vertical and lateral extent of subsurface impact must be defined to the degree that it is necessary to evaluate whether the site currently poses, or in the future may pose, a significant threat to human health and safety, waters of the State, or other nearby sensitive receptors. The level of detail required at a given site will depend on the contaminants of concern, the types of potential receptors and exposure pathways, and the proximity of the potential receptors. Groundwater beneath a site and adjacent surface waters are to be considered as receptors.
3. No waters of the State, or other sensitive receptors are likely to be impacted. Waters of the State include all groundwater and surface water regardless of current use. Central Valley aquifers generally are not segregated into discrete units, but are subject to vertical and horizontal migration of water (either by natural or man-induced mechanisms) and any pollutants carried by or in the water may degrade the waters of the State. Groundwater sample(s) are

required in all cases unless it can be shown that the collection of such sampling) is unreasonable or unattainable, (e.g., the estimated depth to water is greater than 100 feet below the deepest soil impacts).

6.4 NFAR for Cases Above Background Groundwater Conditions

Ideally, the goal of remediation is to ensure that contaminants are cleaned up to background water quality. However, contaminants may be allowed to remain in the groundwater above background levels in certain cases. Any proposal to leave contaminants in groundwater at levels above background must include justification for such degradation. Cleanup levels above background must also conform to all applicable state policies, regulations and procedures. See *Policy for Investigation and Cleanup of Contaminated Sites* in Chapter IV of the Water Quality Control Plans (Basin Plans) for the Central Valley Region.

Central Valley Regional Water Quality Control Board staff have closed UST cases that do not meet background water quality levels, but the water quality objectives at the site are met, or will be met within a reasonable timeframe. In most of these instances, concentrations of pollutants were either below or close to applicable water quality objectives prior to closure.

Cases that have been closed above background levels in groundwater were deemed to be low risks to other receptors such as surface water and drinking water wells. Regional Board staff considers the following low risk factors when making this determination:

1. The source of the UST release has been identified and removed.
2. Free-phase product in groundwater has been removed to the full extent practicable, in accordance with the UST Regulations (Title 23, CCR, Section 2655).
3. Contaminants remaining in the vadose zone cannot migrate in soil vapor or leach at concentrations that would cause

6.6 NFAR Documentation

The purpose for a NFAR request report is to provide a document upon which the regulator may make an objective decision regarding the requested closure. At a minimum, the NFAR request must include the information outlined below. Responsible parties are to provide a one or two sentence narrative summary for each numbered item below, and list the section number where supporting information can be found in the NFAR request. Additional information submitted, such as fate and transport modeling, must include the assumptions and variables used. The NFAR request must include signatures of registered professionals as required by the California Business and Professions Code.

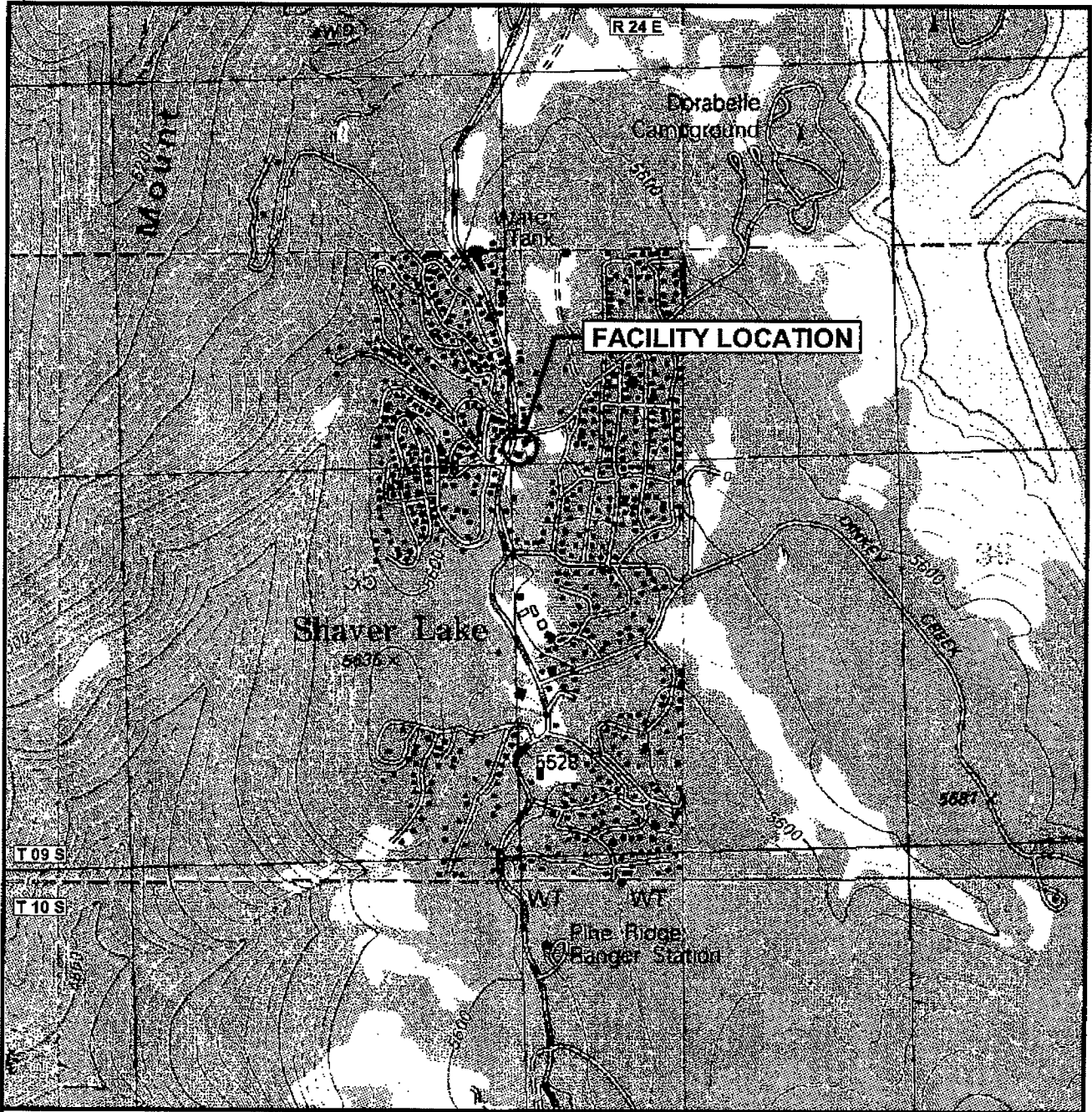
1. Site history and current site conditions.
2. Site geology and hydrogeology.
3. Sensitive potential receptors including water supply wells and surface water.
4. Provide a map showing the location of all water supply wells used for municipal, domestic, agriculture, industrial and other uses within 2,000 feet of the site. Provide well details and distances in a table.
5. Provide scaled site maps of the area impacted showing locations of former and existing tank systems, excavation and sample locations, boring and monitoring well locations, groundwater elevation contours, subsurface utilities, buildings, streets, and any nearby surface waters.
6. Provide boring logs and cross-sections to show site lithology.
7. Report the volume of excavated soil disposed off-site, or remaining on-site.
8. Describe the fate of any remaining monitoring and remediation wells (destroyed, ownership transferred, or to remain in use).
9. Provide tabulated results of all groundwater elevations and depths to water.
10. Provide tabulated results of all sample analyses, including the sampling method and detection limits. Analytical results must include TPH and BTEX constituents, lead, MtBE, EtBE, TBA, ETBE, DIPE, TAME, ethanol, methanol, ethylene dibromide, 1,2-dichloroethane and other constituents as indicated in Table #2 above. Provide any WET or TCLP results.
11. Discuss concentration and mass changes over time, and current concentrations of contaminants remaining in groundwater at the site.
12. Provide isoconcentration contour maps of contaminants of concern to define the lateral and vertical extent of contaminants remaining in soil and groundwater. The contour maps should present an estimated "zero line" of contaminant concentrations both on-site and off-site.
13. Provide a summary of the remedial method(s) used to clean up the site. Include the calculated zone of influence, assumptions used to design the remedial system(s), and the duration of remedial activities.
14. Provide a discussion of whether background is unattainable using best available remediation method(s).
15. Provide a discussion (and estimate) of contaminant mass remaining in soil and groundwater versus contaminant mass removed or destroyed by soil excavation or remedial actions.
16. Provide assumptions, parameters, calculations and the model used in any risk assessments.
17. Provide assumptions, parameters, calculations and the model used in fate and transport modeling.

**TABLE 1 - CHECKLIST OF REQUIRED DATA
FOR NO FURTHER ACTION REQUESTS AT UNDERGROUND TANK SITES**

Site Name and Location:

- 1. Distance to production wells for municipal, domestic, agriculture, industry and other uses within 2000 feet of the site;
- 2. Site maps, to scale, of area impacted showing locations of any former and existing tank systems, excavation contours and sample locations, boring and monitoring well elevation contours, gradients, and nearby surface waters, buildings, streets, and subsurface utilities;
- 3. Figures depicting lithology (cross section), treatment system diagrams;
- 4. Stockpiled soil remaining on-site or off-site disposal (quantity);
- 5. Monitoring wells remaining on-site, fate;
- 6. Tabulated results of all groundwater elevations and depths to water;
- 7. Tabulated results of all sampling and analyses:
 - Detection limits for confirmation sampling
 - Lead analyses
- 8. Concentration contours of contaminants found and those remaining in soil and groundwater, and both on-site and off-site:
 - Lateral and Vertical extent of soil contamination
 - Lateral and Vertical extent of groundwater contamination
- 9. Zone of influence calculated and assumptions used for subsurface remediation system and the zone of capture attained for the soil and groundwater remediation system;
- 10. Reports / information Unauthorized Release Form QMRs (Dates)
 - Well and boring logs PAR FRP Other (report name)
- 11. Best Available Technology (BAT) used or an explanation for not using BAT;
- 12. Reasons why background was/is unattainable using BAT;
- 13. Mass balance calculation of substance treated versus that remaining;
- 14. Assumptions, parameters, calculations and model used in risk assessments, and fate and transport modeling;
- 15. Rationale why conditions remaining at site will not adversely impact water quality, health, or other beneficial uses; and
- 16. WET or TCLP results

By:	Comments:
Date:	

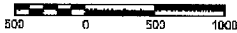


LEGEND

Map Source: SHAVER LAKE 7.5 Minute USGS Quadrangle
 NE ¼ of Section 35, T09S, R24E, MDR&M



SCALE OF FEET



ATTACHMENT 1

CLEANUP AND ABATEMENT ORDER NO. R5-2006-0705

FOR

DARRELL D. MANN, CHERI R. MANN, AND THE DILLEY FAMILY TRUST

SHAVER LAKE FOOD MART, 41801 TOLLHOUSE ROAD

FRESNO COUNTY

SITE LOCATION MAP

**APPENDIX B TO
PETITION FOR REVIEW**



770 L Street, Suite 800
Sacramento, California 95814
main 916.447.0700
fax 916.447.4781
www.stoel.com

LEE N. SMITH
lnsmith@stoel.com

September 27, 2006

Via Facsimile and Email

Mr. Warren Gross
California Regional Water Quality Control Board
Central Valley Region
1685 E Street
Fresno, CA 93706-2020

Re: Shaver Lake Food Mart – Draft CAO dated September 5, 2006

Dear Mr. Gross:

This letter constitutes Mr. and Mrs. Mann's comments to the recent draft CAO dated September 5, 2006 which we, as counsel for Mr. and Mrs. Mann, received on September 20, 2006. In summary, the Regional Board is indicating that it will issue an order only to Mr. and Mrs. Mann with regard to the Shaver Lake Food Mart, despite the number of other tanks of record in the area. Further, the scope of the investigation as set forth in the draft CAO is such that the Mann's will not be able to afford it absent coverage under the Underground Tank Fund. Mr. Mann is diligently pursuing the Tank Fund coverage and expects to file an appeal this week.

Notwithstanding, the following are non-exclusive comments that we have to the CAO at this time. For unknown reasons, counsel only just received the draft CAO on Wednesday, September 20, 2006, and met with the Regional Board on September 26, 2006 and has not had sufficient time for comments, and thus, reserves its rights to submit additional comments.

- 1) From the outset, we would point out that it is unclear whether the contamination identified in the CAO that is impacting wells actually originated at the Shaver Lake Food Mart. There are numerous other potential sources that include: Ken's Payless Service Station, Yancy's Lumber Yard, the Trading Post, Commercial Strip Mall, Shaver Lake Liquors, Shaver Lake Power Center, Chevron Bulk Oil Plant, Curry Brothers and Southern California Edison. The Regional Board should include all of these additional entities in the CAO. County records need to be located and reviewed.
- 2) Given the age of the Shaver Lake Food Mart, Mr. Mann may not have owned the station at the time the actual releases occurred; the former owners should be included in the CAO.

Oregon
Washington
California
Utah
Idaho



Warren Gross
September 27, 2006
Page 2

- 2) The CAO requirements are extensive and have been estimated to result in a cost in the range of \$1.7 million. Mr. and Mrs. Mann have insufficient funds, absent acceptance under the Underground Tank Fund, to accomplish the tasks required in the draft CAO. The Regional Board staff needs to assist Mr. Mann in obtaining coverage under the Tank Fund, and/or reduce the scope of the investigation and bring other potentially responsible parties on board.
- 3) It is highly unlikely that the upgradient drinking well (Olson's) was impacted by the downgradient Shaver Lake Food Mart facility and any requirement to provide the Olson's with replacement water is unsupported by the evidence at this time.
- 5) Some of the wells at issue are not properly constructed, which may contribute to the contamination.
- 6) Shaver Lake's sewer system may be contributing to the spread of contamination.
- 7) One of the wells (Olson's) is being used for the public and is not constructed properly for that purpose.
- 8) The existing work plans proposed by a prior consultant need to be received, reviewed and resubmitted.
- 9) There is a septic field at Olson's that must be considered.
- 10) Any samples taken from the "hole" at Shaver Lake Hardware are suspect.

With respect to the draft CAO itself:

- 11) paragraph 7 - There is insufficient proof that the Shaver Lake Food Mart was the discharger.
- 12) paragraph 8 - Replacement water can only be required if there is proof that the discharger caused the contamination.
- 13) paragraph 1 - The scope of the tasks is overly broad, and given the nature of time and proof constraints, the Order should be narrowed.
- 14) There are too many wells within 1/2 mile to adequately examine them all, many of which would not be impacted by the Shaver Lake Food Mart.



Warren Gross
September 27, 2006
Page 3

- 15) Water replacement should not be required unless liability/causation is supported by substantial evidence.
- 16) The public participation process is premature and will raise divisive issues in the community which cannot be addressed until the State funding is obtained and/or the well survey analytical results are obtained. The following were described in Mr. Minney's letter of September 22, 2006:
- a) Ken's Payless Service, also a prior Exxon Station: Apparently, instead of upgrading tanks per the regulations around 1998 to 1999, the tanks were removed and contamination was discovered. The owner of the tanks has died but his heirs still retain business at the same location. The retail business has a peculiar layout which Mr. Mann considers representative of older gas stations in Shaver Lake, raising the possibility that there are still tanks predating registration requirements in the ground. This is the northernmost tank site identified and is 0.34 mile north of Shaver Lake Food Mart as the road runs.
 - b) Yancy's Lumber Yard/Shaver Lake Hardware: Yancy's Lumber Yard was a large lumber yard operation at the time when logging was a major industry in the area. Mr. Mann does not know the age or depth of the well on that property. The prior consultant had a filter installed on the well when detects of gasoline were found. Mr. Mann is certain that the site had above ground gasoline and diesel tanks (ASTs) which were uphill (and therefore likely upgradient) of the well in question. The ASTs were removed when there was no regulation requiring testing for contamination. Although Mr. Mann's consultant installed the filter, Mr. Mann remains convinced that the fuel detected in the well or originates from the long periods of time that gasoline was handled on this site upgradient the well. The site is located 250 feet south of the Shaver Lake Food Mart. The well is located about 350 feet from the island at the Shaver Lake Food Mart. If the direction of groundwater flow is parallel to surface topography, this well is clearly upgradient of the Shaver Lake Food Mart.
 - c) The Trading Post is across the street from Yancy Lumber/Shaver Lake Hardware and is also then 250 feet south from Shaver Lake Food Mart. Mr. Mann recalls that this was an old gas station which went out of business before tank registration was required. Furthermore, Mr. Mann recalls that the tanks were never removed and became an issue the last time the property was sold. It is Mr. Mann's



understanding that a closure letter was required to complete the last sale but does not know who wrote the letter. Mr. Mann believes the tanks are still there.

- d) There is a Commercial Strip Mall which was constructed some time in the 1980s. Mr. Mann is certain that aboveground gasoline tanks were present and that aboveground diesel tanks may have been present. The site has its own well that periodically has low flow issues. There are no hydrocarbon detections known to Mr. Mann. Mr. Mann believes the ASTs were removed without any testing for associated spills or leaks. The site is 0.13 mile south of the Shaver Lake Food Mart as the road runs.
- e) Shaver Lake Liquors is a former gas station site at the intersection of Tollhouse and Dinky Creek. The gas station went out of business before tank registration was required. Mr. Mann believes that the underground tanks are still there. The site is located 0.42 mile south of the Shaver Lake Food Mart as the road runs.
- f) Shaver Lake Power Center is the location of a former gas station owned by a partnership that includes Mr. Mann, and has been deemed eligible for UST Fund after initially being denied. It is located across the street from Shaver Lake Liquors and is 0.44 mile south of the Shaver Lake Food Mart.
- g) There is a long-time Chevron Bulk Oil Plant that went out of business in the late 1980s. Numerous tanks were present and all types of fuels were handled. The property was purchased by the Big Creek Elementary School District for a school site, which was never built (under current regulations regarding school sites and contamination, it is unreasonable to consider putting an elementary school on an old bulk oil site). The site is contiguous with the Caltrans yard. Mr. Mann recalls that there were a number of underground fuel tanks on the Caltrans site that have now been replaced with ASTs. The sites are 0.32 mile south of the Shaver Lake Food Mart as the road runs.
- h) Curry Brothers operated an Exxon Oil Plant for many years at the intersection of Dinkey Creek and Musick. Mr. Mann recalls that there was contamination associated with fuel leaks which required installation of filtration systems on off-site domestic wells. The site is now a Napa parts store. It is located 0.64 mile south and east of the Shaver Lake Food Mart as the road runs; the straight line distance would be substantially less.



Warren Gross
September 27, 2006
Page 5

- i) Southern California Edison operates a service center. Years ago, SCE had installed underground tanks for gasoline and diesel that to float out of the ground. Mr. Mann inspected the tanks and observed that they had moved six inches, which is enough to damage the piping. SCE then decided to remove the tanks and sold them to Mr. Mann as the tanks themselves were not damaged. SCE has since used ASTs to handle fuel at this location. The site is located 0.75 mile south and east of Shaver Lake Food Mart as the road runs; the straight line distance would be substantially less.

We reserve our right to make additional comments as they arise.

Very truly yours,

Lee N. Smith
LNS:jmw

cc: Darrell Mann
John Minney

**APPENDIX C TO
PETITION FOR REVIEW**



770 L Street, Suite 800
Sacramento, California 95814
main 916.447.0700
fax 916.447.4781
www.stoel.com

LEE N. SMITH
lnsmith@stoel.com

September 27, 2006

Via Facsimile and Email

Mr. Warren Gross
California Regional Water Quality Control Board
Central Valley Region
1685 E Street
Fresno, CA 93706-2020

Re: Shaver Lake Food Mart – Draft CAO dated September 5, 2006

Dear Mr. Gross:

This office represents Darrell and Cheri R. Mann, the owners of the Shaver Lake Food Mart. Our original comments to the draft CAO dated September 5, 2006 are enclosed with this letter and should be included with the comments that Mr. Minney made yesterday. Because we only received the draft CAO on September 20, 2006, and comments were requested by today, we are reserving our right to submit additional comments

After our meeting with Messrs. Van Voris, Noonan and Gross yesterday, September 26th, Mr. Mann has the following proposal as to the CAO schedule: Because of the Regional Board's staff's stated concerns as presented at the meeting on September 26, 2006, Mr. Mann is willing to fund the finalization of the survey of wells within 1,000 feet, as agreed, rather than ½ mile and the sampling per the current draft CAO schedule (*see* draft CAO, nos. 2-4). As you are aware, Mr. Mann is waiting for his appeal to the Fund, and thus, the work plan for completing site investigation will need to wait for that determination; thus paragraph 5 should be extended until at least January 2007, and can be accomplished in conjunction with CAO, paragraphs 5-10.

In addition to the well survey, Mr. Mann will also provide a work plan for the pilot test using Cal Clean to correspond to the time available at the Mile High site.



Warren Gross
September 27, 2006
Page 2

Here are the following suggested changes to the dates in the draft CAO under the required action section:

Paragraph 2. Water Supply Survey - satisfactory.

Paragraph 3. Sample Plan Implementation – satisfactory.

Paragraph 4. Alternate Water Supply – Mr. Mann will not provide replacement water unless it is proven that he is responsible, and may need to wait for funding from the Underground Tank Fund. Further, the term “in-kind” has no legal meaning and should be deleted.

Paragraph 5. SIW - the Site Investigation Work Plan will need to wait until a decision is made from the Fund. Move this date to January, 2007.

Paragraph 6. Implementation – Move this date based on Underground Tank Fund decision; move to February 2007.

Paragraph 7. PIER - *see* paragraph 6.

Paragraph 8. PIER Implementation - *see* paragraph 6.

Paragraph 9 – PAR – *see* paragraph 6.

Paragraph 10 – Public Participation – this should occur after the results of the sampling in January 2007.

Paragraph 11 – Feasibility Study - *see* paragraph 6.

Paragraph 12 – Remediation Action Plan - *see* paragraph 6.

Paragraph 13 – Implementation of monitoring and other activities are subject to Underground Tank Funding and the constraints of that program. Many of the General Requirements are premature given that the remedial system has not been designed yet.

Monitoring Requirement – Given Mr. Mann’s financial condition, the frequency of monitoring is unreasonable.



Warren Gross
September 27, 2006
Page 3

We look forward to working with you on this matter, and as noted, reserve our right to submit additional comments.

Very truly yours,

Lee N. Smith
LNS:jmw

cc: Darrell Mann
John Minney