



California Regional Water Quality Control Board

San Diego Region



Alan C. Lloyd, Ph.D.
Secretary for
Environmental
Protection

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May 25, 2005

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| <p>Mr. Gary Erbeck, Director County of San Diego Department of Environmental Health P.O. Box 129261 San Diego, CA 92112-9261</p> <p>In reply refer to: TSMC:73-0035:jodermatt</p> | <p>Mr. Gary Root, Director County of Riverside Department of Environmental Health 4065 County Circle Drive, Riverside, CA 92503</p> <p>In reply refer to: TSMC:73-0008:jodermatt</p> | <p>Mr. Steve Wong County of Orange, Health Care Agency County of Orange Health Care Agency PO Box 355 Santa Ana, CA 92702</p> <p>In reply refer to: TSMC:73-0028:jodermatt</p> |
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Dear Messrs. Erbeck , Root and Wong,

RE: ORDER NO. R9-2005-0157: REVIEW OF LOP CASE CLOSURES AND SUPPORTING DATA REQUIREMENTS FOR THE SAN DIEGO REGION

On January 1, 2005, the State Water Resources Control Board (SWRCB) regulations went into effect for electronic reporting (section 3890, Division 3, Title 23, California Code of Regulations). The California Regional Water Quality Control Board, San Diego Region (Regional Board) has received and continues to receive Case Closure Summaries from your agency staff, as required by your Local Oversight Program (or LOP) contract with the SWRCB. However, the Regional Board is concerned that the LOP agencies are continuing to request our concurrence with LOP case closures although the Responsible Party(ies) (RP) have not complied with the existing electronic reporting requirements.

BACKGROUND INFORMATION

ELECTORNIC REPORTING. In 2000, the legislature passed AB 2886 giving the SWRCB the authority to require that analytical and environmental compliance data be submitted in a standardized electronic format.

In 2001, the State Water Resources Control Board adopted emergency regulations to implement electronic reporting of information from leaking underground storage tank (LUST) sites. These requirements were promulgated as Article 12 in Chapter 16 of the California Code of Regulations (CCR). Section 2729.1 (a) required that reports required to be submitted to State

Board, Regional Board, or local agency, pursuant to Chapters 6.7 to 6.75 of the Health and Safety Code, and containing soil or water chemistry analysis shall also be submitted to the State Board's Geographic Environmental Information Management System (GEIMS was the first roll out of Geotracker) database using electronic deliverable format or "EDF." Section 2729 of Chapter 16 defines the required information to be submitted in EDF as the chain-of-custody documents, laboratory results and quality assurance (QA) data. Further, section 2729.1 (d) required electronic submission of data generated by analysis of soil or water samples shall be required beginning on September 1, 2001.

Starting on January 1, 2002, section 2729.1 (b), Chapter 16 of the CCR required any person submitting this type of data shall also include the location data for where samples were collected, location of monitoring wells and surveyed elevation of groundwater relative to mean sea level for any monitoring well sampled.

On January 1, 2005, the expanded SWRCB regulations went into effect for electronic reporting (section 3890, Division 3, Title 23, California Code of Regulations).

ELECTRONIC REPORTING TIMELINE SUMMARY

| Date/Timeframe | Event or Requirement |
|-------------------|---|
| 2000 | Legislature passed AB 2886 requiring electronic reporting. |
| 2001 | SWRCB adopts emergency regulations as Article 12, Chapter 16, Title 23, CCR. |
| September 1, 2001 | Regulations require that soil and water data collected to satisfy reporting requirements for Health and Safety Code Chapters 6.7 and 6.75 must be submitted electronically. |
| January 1, 2002 | Location information must be provided with electronic data. |
| November 2004 | SWRCB adopted electronic submittal of information (ESI) regulations for all groundwater sites. Included sites regulated under other regulations/ codes and added additional e-reporting requirements. |
| January 1, 2005 | ESI regulations went into effect |
| July 1, 2005 | Electronic submittal of information of complete reports and data submitted to Geotracker replaces the need for paper copy submitted to regulatory agencies, in the absence of the agency specifying another form of submittal to the Discharger(s). |

The Regional Board is concerned that the LOP agency staffs are continuing to request our concurrence with LOP case closures even though: a.) the Responsible Party may not be in compliance with the minimum electronic reporting requirements that have existing in one form or another since 2001 and b.) the SWRCB UST Cleanup Fund has reimbursed the Responsible

Party for reporting results from investigation, cleanup and abatement of groundwater pollution from this site. This situation continues although the applicable electronic reporting requirements that have existed in one form or another since 2001.

RISK BASED CLOSURES OF LOP CASES. Parties responsible for cleanup and abatement of petroleum hydrocarbon pollution, from leaking underground storage tanks (LUSTs), are required to take corrective action in compliance with the applicable state regulations section 2720 et seq., Chapter 16, Title 23, CCR and the State Water Resources Control Board Resolution No. 92-49, Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code §13304. Resolution No. 92-49 directs that water affected by an unauthorized release attain either background water quality or the best water quality that is reasonable if background water quality cannot be restored. (SWRCB Resolution No. 92-49, Section III.G.) Any alternative level of water quality less stringent than background must be consistent with the maximum benefit to the people of the state, not unreasonably affect current and anticipated beneficial use of affected water, and not result in water quality less than that prescribed in the water quality control plan for the basin within which the site is located.

The SWRCB has previously determined that Resolution No. 92-49 does not require, however, that the requisite level of water quality be met at the time of case closure at leaking underground storage tank (LUST) sites. Resolution No. 92-49 specifies compliance with cleanup goals and objectives within a reasonable time frame (*Id.* at section III.A.). Therefore, even if the requisite level of water quality has not yet been attained, a LUST case may be closed if the water quality objective(s) will be attained within a reasonable period of time. The time to attain groundwater cleanup goals is reasonable if the residual concentrations of pollutants do not pose a risk to the existing and future beneficial uses of the affected water resources, human health, and the environment during the period.

Attachment 1 to this letter identifies the technical analyses and documentation that must be provided to the Regional Board to help demonstrate that residual concentrations of fuel constituents at an LOP case do not pose a significant risk to beneficial uses of the water body during the period between site closure and attainment of water quality goals.

A. THE REGIONAL BOARD HEREBY FINDS

1. The Regional Board continues to receive Case Closure Summaries and letters from the LOP agency staffs requesting concurrence with closure of leaking underground storage tank (UST), although the responsible parties (RPs) for those cases have not complied with the minimum electronic reporting requirements in applicable regulations promulgated by the SWRCB.

2. A minimum amount of supporting technical information (including the required electronic information in Geotracker) must be provided for the Regional Board staff to evaluate requests by the LOP staff for concurrence with case closures. The LOP staffs must ensure that the minimum information is made available to the Regional Board in the Geotracker database.
3. The LOP agencies must provide the Regional Board with written and appropriately signed case closure summaries (per SWRCB LOP Contact - Tasks 9.A and 9.E) when requesting Regional Board concurrence with closure of an LOP agency case.
4. The LOP agencies must provide the Regional Board with written information, including technical reports and plans as follows:

"The Contractor shall ensure the appropriate Regional Board receives copies of all UST related correspondence with Responsible Parties or their consultants unless the Regional Board states that it does not want to receive copies. This will include copies of all technical reports, feasibility studies and remedial action plans. Contractor may direct the responsible parties and their consultants to submit such information directly to the Regional Board. This may be accomplished by scanning the information into a "pdf" format and subsequently uploading it to Geotracker, as referenced in Section 13 of the LOP Guidebook."

5. In 2000, the SWRCB requested that the LOP agencies and Regional Boards (see Attachment 2) provide analytical results for other fuel oxygenates (e.g., tertiary-butyl-alcohol or TBA) as well.
6. The Regional Board is concerned that the information regarding corrective actions and proposed case closure be provided to the affected fee interested property owner(s) of the affected property(ies) have been notified (pursuant to Health and Safety Code section 25296.20¹). The statute requires notification of the fee interested property owner(s) of your proposed action and/or given the opportunity to review and comment on the proposed closure of this case.
7. The Regional Board continues to received requests to concur with "risk based" closure of LOP agency cases. The objective evaluation of such requests requires that a minimum amount of supporting technical information (see Attachment 1 to this letter) be provided

¹ HSC 25296.20. (a) The local agency, the board, or a regional board shall not consider corrective action or site closure proposals from the primary or active responsible party, issue a closure letter, or make a determination that no further corrective action is required with respect to a site upon which there was an unauthorized release from an underground storage tank unless all current record owners of fee title to the site of the proposed action have been notified of the proposed action by the local agency, board, or regional board.

to the Regional Board staff to consider concurrence with requests for risk based closures. When proposing a risk based closure of an LOP site, the LOP agency staff must ensure that the minimum information requested in Attachment 1 is made available to the Regional Board in writing and through the Geotracker database.

B. REQUEST FOR INFORMATION

Under authority of the California Water Code section 13225(c) and as specified in the SWRCB LOP contracts, I hereby request that all Local Oversight Program (LOP) agencies ensure that their Responsible Parties/Dischargers comply with the following requirements at all LOP cases located within the San Diego Region:

1. For all LOP agency cases in the San Diego Region:

- 1.) Before submitting an LOP Case Closure Summary to the Regional Board, the LOP agency staff must ensure the Geotracker database contains copies of all laboratory data and other electronic information required by the 2001 emergency electronic reporting regulations for leaking UST cases. To comply with this request, the LOP agencies may ensure that the Responsible Party(ies) have complied with the electronic reporting requirements (via submittal of electronic deliverable format or EDF) or they may ensure that pdf files of the requisite data are available in the Geotracker database.
- 2.) Before submitting an LOP Case Closure Summary to the Regional Board, the LOP agency staffs must ensure the Geotracker database contains copies of all technical reports, monitoring reports, laboratory data, work plans, all public and property owner notifications, corrective action plans, and corrective action verification and monitoring reports submitted after **January 1, 2005**.
- 3.) Before submitting an LOP Case Closure Summary to the Regional Board, the LOP agency staffs must ensure the Geotracker database contains a complete copy of all minimum data required by electronic reporting requirements in section 3893, Division 3, Title 23, CCR. The required data must available in Geotracker database and include the following minimum information:
 - 1) The latitude and longitude of any permanent monitoring well for which data is reported in EDF format, accurate to within 1 meter and referenced to a minimum of two reference points from the California Spatial Reference System (CSRS-H), if available.
 - 2) The surveyed elevation relative to a geodetic datum of any permanent monitoring well.

- 3) The elevation of groundwater in any permanent monitoring well relative to the surveyed elevation.
 - 4) A site map or maps showing the location of all sampling points referred to in the report.
 - 5) The depth to the screened interval and the length of screened interval for any permanent monitoring well.
 - 6) Boring logs, in PDF format.
 - 7) A complete copy of the report, in PDF format, which includes the signed transmittal letter and professional certification.
- 4.) Within 5 days of sending a paper copy of the LOP Case Closure Summary, and any necessary supporting information to the Regional Board for review, the LOP agencies must ensure that a copy of the closure summary and all the supporting information is also available in the Geotracker database.
- 2. For all LOP agency cases proposed for closure but not attaining compliance with the Water Quality Objectives for the San Diego Region**
- a.) For discharges of fuel constituents that have migrated outside the property boundary controlled by the RP(s) or where other fee interested property owners are affected by the release, the LOP agency staff must ensure that the Geotracker database includes a complete copy of any public notification document(s) and relevant correspondence to show that the RP and the LOP agency have satisfied the requirements of section 2728, Article 11, Title 23, CCR; and Health and Safety Code section 25296.20(a) and 25296.20(b). This information must be available in the Geotracker database, before submitting an LOP Case Closure Summary for review by the Regional Board.
 - b.) A copy of the final site conceptual model, and time versus concentration plots for key residual contaminants in a source area well, a mid-plume well and a distal plume. The site conceptual model helps staff understand the relationship among pollution sources, complete pathways, and sensitive receptors at and near the site. The time vs concentration plots and distance vs concentration plots help document stability of residual pollutant concentrations within the plume. Please include groundwater elevation on the time versus concentration plots and an R^2 value for any trend line(s). Ensuring that these documents are provided in the Geotracker database before providing the Regional Board with your LOP Case Closure Summary will help to expedite our review of the case closure summary and save us the time of requesting that the LOP agencies provide additional information. This information must be available in the Geotracker database, before submitting an LOP Case Closure Summary for review of a proposed "risk-based" closure by the Regional Board.

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- c.) Before submitting an LOP Case Closure Summary to the Regional Board, the LOP agencies must ensure the Geotracker database contains a complete copy of a technical evaluation for all the factors and minimum information identified in Attachment 1 to this Order.

Further, pursuant to Task 9.A of your the Local Oversight Program (LOP) contract:

“Upon completion of all remedial action at a site, the Contractor shall summarize closure data on the Case Closure Summary currently identified in Section 9 of the LOP Guidebook and may be provided on Geotracker. This form must be signed by the Environmental Health Director (or equivalent) and forwarded to the appropriate Regional Board Executive Officer (or designee) and to all Responsible Parties and landowners identified pursuant to Sections 25297.1 and 25297.15 of the Health and Safety Code.”

I hereby designate the Supervisor of the Regional Board Tanks Site Mitigation and Cleanup Unit (Mr. John Odermatt) to be my designee for receipt of all LOP Case Closure Summaries for the San Diego Region. You may contact him at the Regional Board via telephone at 858-637-5595 or email at jodermatt@waterboards.ca.gov. For the San Diego Region, please direct all future LOP Case Closure Summaries to his attention, as follows:

California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Attn: Supervisor Tanks Site Mitigation and Cleanup Unit (John Odermatt)

Please advise your LOP agency staffs and affected RPs to comply with the minimum requirements of this Order. The Regional Board staff will not be in a position to concur with closure of affected LOP cases, unless your LOP cases comply with the minimum requirements specified in this Order. Your cooperation in helping us to ensure that affected Responsible Parties/Dischargers comply with these requirements is appreciated.

The heading portion of this letter includes a Regional Board code number noted after “In reply refer to:” In order to assist us in the processing of your correspondence please include this code number in the heading or subject line portion of all correspondence and reports to the Regional Board pertaining to this matter.

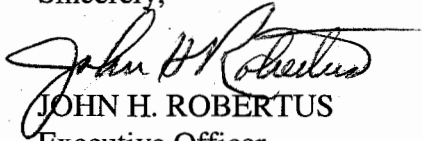
County DEH Directors/LOP Agencies
Electronic Reporting and LOP Case
Closure Summaries: Order R9-2005-0157

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If you or your staff have any questions regarding this Order, please contact Ms. Jody Ebsen at TEL: 858-636-3146 or jebsen@waterboards.ca.gov or Mr. John Odermatt at TEL: 858-637-5595 or jodermatt@waterboards.ca.gov.

Sincerely,


JOHN H. ROBERTUS
Executive Officer

Cc: Ms. Liz Haven, SWRCB UST Program

Mr. Kevin Graves, SWRCB UST Program

Mr. Ronald Duff, SWRCB UST Cleanup Fund

Mr. George McCandless, County of San Diego, Department of Environmental Health
P.O. Box 129261, San Diego, CA 02112-9261

Ms. Karen Hodel, County of Orange Health Care Agency/Environmental Health
1241 E Dyer Rd, Suite 120, Santa Ana, CA 92705-5611

Ms. Sandy Bunchek, County of Riverside Department of Environmental Health, PO Box 7600 / 4065
County Circle Dr., Riverside, CA 92503

California Environmental Protection Agency

ATTACHMENT 1:

MINIMUM INFORMATION FOR SAN DIEGO REGIONAL BOARD TO REVIEW AND CONSIDER RISK BASED CLOSURE OF LOP SITES

To assist Regional Board staff in reviewing Local Oversight Program (LOP) agency case closure summaries, the information below must be made available in the Geotracker database for LOP cases where water quality objectives will not be attained by the date of case closure. The LOP agency shall: a.) provide paper copies of the information requested below to the Regional Board and b.) ensure that all the requested information is uploaded into the Geotracker database before submitting the LOP Case Closure Summary for review by the Regional Board.

- 1. Documentation that existing beneficial uses of the water have not been impaired by the pollution from the LOP agency case.**
- 2. Documentation that the Responsible Party (RP) has complied with the State Water Board fuel oxygenate sampling request.** The RP must perform the screening level analysis for the full suite of fuel oxygenates as requested by the SWRCB (2000) in their letter issued to the LOP agencies and Regional Boards.
- 3. A technical analysis showing that the pollutant plume is diminishing over time with either an overall decrease in size, mass or a decrease in pollutant concentration trend.** The sufficiency of this analysis depends on the vulnerability of nearby existing and future receptors. A site with an MTBE plume within the zone of influence of a water supply well (or planned well), would require a more rigorous analysis than a site with a BTEX plume outside the zone of influence. In the latter, lower risk case, time versus concentration plots and distance versus concentration plots for four consecutive quarters of sampling may suffice to demonstrate that the plume is diminishing. However, if the risk to a receptor is high, as in the former case, time versus concentration plots, distance versus concentration plots, and site-specific results from a pollutant fate and transport model based using multiple years of quarterly monitoring may be appropriate. Best professional judgment should always be used.
- 4. Calculations or estimates, based on extrapolation of time versus concentration trends, distance versus concentration trends, standard models or other scientifically defensible procedures, predicting when residual constituent concentration levels are anticipated to comply with water quality objectives.** Calculations and estimates should be made for the most contaminated areas of the site, generally the "source zone" where light nonaqueous phase liquid (LNAPL)

hydrocarbons and other fuel constituents may be trapped in the vadose zone or below the water table.

5. **Documentation supporting your conclusion that beneficial uses of the impaired water will not occur within the time projected to meet water quality objectives.**
6. **Documentation that the RP has complied with the applicable electronic reporting requirements for Geotracker.** The Responsible Party (Discharger) must comply with the electronic reporting requirements section 3890, Division 3, Title 23, California Code of Regulations. The Regional Board will use the Geotracker database to assess the availability of all the minimum electronic information, and the RP's compliance the applicable state regulations, as required by this Order (Order No. R9-2005-0157).
7. **Documentation that the RP and LOP agency have complied with all applicable public notification requirements in section 2728, Article 11, Title 23, CCR and applicable requirements of the Health and Safety Code (HSC section 25296.20).** The local agency, the board, or a regional board shall not consider corrective action or site closure proposals from the primary or active responsible party, issue a closure letter, or make a determination that no further corrective action is required with respect to a site upon which there was an unauthorized release from an underground storage tank unless all current record owners of fee title to the site of the proposed action have been notified of the proposed action by the local agency, board, or Regional Board. The Regional Board will use the availability of electronic information in the Geotracker database to assess the RP's compliance with the applicable state requirements and this Order (Order No. R9-2005-0157).



Winston H. Hickox
Secretary for
Environmental
Protection

State Water Resources Control Board

Division of Clean Water Programs

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FAX (916) 227-4349



Gray Davis
Governor

ATTACHMENT 2

TO: Regional Water Quality Control Board UST Program Managers
and Local Oversight Program Managers

FROM: Elizabeth L. Haven, Manager
Underground Storage Tank Programs
DIVISION OF CLEAN WATER PROGRAMS

DATE:

SUBJECT: REGIONAL WATER QUALITY CONTROL BOARD UST PROGRAM
MANAGERS AND LOCAL OVERSIGHT PROGRAM MANAGERS

In July 1996 we requested that you add MTBE to the list of gasoline components which are being monitored at your open gasoline UST release sites. Because of growing concern about other oxygenates we now request that you add the other ether oxygenates [diisopropyl ether (DIPE), tertiary amyl methyl ether (TAME), and ethyl tertiary butyl ether (ETBE)] as well as tertiary butyl alcohol (TBA) to the list of gasoline components to be monitored. Where initial monitoring indicates the presence of any of these compounds, continued assessment would be appropriate as with MTBE. The appropriate analytic test method is USEPA Method 8260. We know that several agencies are already requiring such monitoring.

In a January 18, 2000 memorandum (attached), the USEPA Office of Underground Storage Tanks suggested assessing for other oxygenates. Following this memorandum and a request from the Santa Clara Valley Water District, we consulted with the State Department of Health Services (DHS) and the Office of Environmental Health Hazard Assessment regarding concentrations of concern for these compounds.

To date, there is limited scientific information to establish health-based screening levels for DIPE, TAME and ETBE. However, these ethers have similar physical characteristics to MTBE in terms of the taste and odor detection levels. The DHS has established 12 parts per billion as an action level for TBA. An action level is a health-based advisory level established by DHS for chemicals for which primary drinking water standards have not been established.

To determine the need to request the development of primary and/or secondary drinking water standards for DIPE, TAME and ETBE, we request that you report the results of monitoring for

California Environmental Protection Agency

Regional Water Quality Control Board
UST Program Managers and
Local Oversight Program Managers

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these ethers as well as TBA so that we can assess the extent of the problem. Fields created in GEIMS for reporting monitoring results for MTBE will also accommodate the reporting of these ethers and TBA.

Finally, where new releases are suspected in an area being supplied with ethanol as a gasoline additive, ethanol should be monitored. We have asked the Lawrence Livermore National Laboratory for guidance on analytical methods for ethanol. We will forward that guidance to you once it is prepared.

If you have questions or comments related to this request, please call Ms. Kim Ward at (916) 227-4319.

Attachment

HAVENE/lopezv/4/12/00
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