



Linda S. Adams
Secretary for
Environmental Protection

California Regional Water Quality Control Board San Diego Region

Over 50 Years Serving San Diego, Orange, and Riverside Counties
Recipient of the 2004 Environmental Award for Outstanding Achievement from USEPA



Arnold Schwarzenegger
Governor

9174 Sky Park Court, Suite 100, San Diego, California 92123-4353
(858) 467-2952 • Fax (858) 571-6972
[http:// www.waterboards.ca.gov/sandiego](http://www.waterboards.ca.gov/sandiego)

CERTIFIED MAIL – RETURN RECEIPT REQUESTED
7008 1140 0002 4285 4206

October 28, 2010

Mr. Nick Pavone, Fire Chief
Rancho Santa Fe Fire Department
16936 El Fuego Street
Rancho Santa Fe, California 92067

In reply refer to:
T0607301750:smclain

Dear Mr. Pavone:

SUBJECT: INVESTIGATIVE ORDER NO. R9-2010-0114, FOR RANCHO SANTA FE FIRE DEPARTMENT, RANCHO SANTA FE, CALIFORNIA

Enclosed is Investigative Order No. R9-2010-0114 issued by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) to the Rancho Santa Fe Fire Department (RSFFD). The Order directs the RSFFD to investigate the potential human health risks from the pollution and nuisance created by an unauthorized discharge of waste constituents from the former underground storage tanks on the RSFFD property.

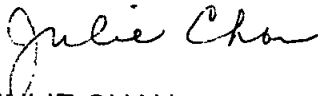
The Investigative Order is issued under authority of California Water Code section 13267. The human health risk assessment report required by the Investigative Order is due on **February 27, 2011**. Please review the requirements contained within the Investigative Order and note that the technical report submitted to the San Diego Water Board must be accompanied by the certification, under penalty of law, that the information is true, accurate, and complete.

The procedures for appeal of this enforcement action to the State Water Board can be found in Sections H.3 and H.4 of the attached Order. Please note that the process of requesting an evidentiary hearing and/or appeal to the State Water Board does not automatically suspend or postpone the need to comply with requirements and due dates in the Order attached to this letter.

For questions pertaining to the subject matter, please contact Mr. Sean McClain at (858) 627-3988 or via email at smclain@waterboards.ca.gov.

In the subject line of any response, please include the requested "in reply refer to" information located in the heading of this letter.

Sincerely,



JULIE CHAN

Chief, Cleanup and Land Discharge Branch

jc:cl:sm

Enclosures: Cleanup and Abatement Order No. R9-2010-0114

cc:

Mr. Stephan A. Beck, Ninyo and Moore, via e-mail sbeck@ninyoandmoore.com

Ms. Christine Chiu, Department of Toxic Substances Control via e-mail
CChiu@dtsc.ca.gov

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

INVESTIGATIVE ORDER NO. R9-2010-0114

AN ORDER DIRECTING THE RANCHO SANTA FE FIRE DEPARTMENT TO
SUBMIT A TECHNICAL REPORT PERTAINING TO AN INVESTIGATION OF
POTENTIAL HUMAN HEALTH RISK AT THE SITE OF:

RANCHO SANTA FE FIRE DEPARTMENT
16936 EL FUEGO STREET
RANCHO SANTA FE, SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) finds that:

1. **Legal and Regulatory Authority:** This Order conforms to and implements policies and requirements of the Porter-Cologne Water Quality Control Act (Division 7, commencing with Water Code section 13000) including (1) sections 13267; (2) applicable State and federal regulations; (3) all applicable provisions of statewide Water Quality Control Plans adopted by the State Water Resources Control Board (State Water Board) and the *Water Quality Control Plan for the San Diego Basin* (Basin Plan) adopted by the San Diego Water Board including beneficial uses, water quality objectives, and implementation plans; (4) State Water Board policies and regulations, including State Water Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California*; Resolution No. 88-63, *Sources of Drinking Water*, and Resolution No. 92-49. California Code of Regulations (CCR) Title 23, Chapter 16, Article 11; CCR Title 23, section 3890 et. seq., and (5) relevant standards, criteria, and advisories adopted by other State and federal agencies.
2. **Unauthorized Discharge of Petroleum Hydrocarbon Waste:** The Rancho Santa Fe Fire Department (RSFFD) removed two, 550-gallon underground storage tanks (USTs) (one gasoline and one diesel) in October 1992. Discharges of gasoline and diesel from the USTs have resulted in petroleum hydrocarbon waste impacts to soil and groundwater at the property and caused violations of applicable water quality standards. Discharges of wastes from soil to groundwater, and continued migration of wastes in the groundwater have caused violations of applicable water quality standards in a plume extending approximately 700 feet northwest of the facility. These gasoline constituents are not

naturally occurring and are wastes, as defined in California Water Code section 13050, subdivision (d).¹

The RSFFD conducted interim remedial actions including soil excavation, product removal from the groundwater, and dual phase extraction from 1992 to 2006. A preliminary soil vapor survey was completed in July 2001.² Fourteen soil vapor points were sampled on the adjacent residential and school properties. Ninyo and Moore (RSFFD consultant) concluded that "a cumulative risk to receptors from residual concentrations of the constituents of potential concern in a residential setting is not considered significant." The County of San Diego, Department of Environmental Health, Site Assessment and Mitigation issued the Discharger a no further action letter in April 2008.

A recent human health risk evaluation in support of an updated human health screening evaluation was completed on four parcels proposed for the expansion of the Rancho Santa Fe School District (RSFSD).³ The four parcels of land are located downgradient of the RSFFD. Groundwater monitoring wells MW-2N, MW-13, and ERM-MW-01 located on the adjacent properties were sampled in February and April 2010.

The following table presents the highest groundwater concentrations of selected compounds detected in samples collected from offsite groundwater monitoring wells during the 2010 sampling events.

Compound	Maximum Groundwater Concentrations from 2010 sampling events ($\mu\text{g/L}$)
TPH-g	15,000
Benzene	1,800*
Ethylbenzene	98
MTBE	52,000
Tertiary butyl alcohol	60,000
Methylene Chloride	11

* Result for benzene from 2006 sampling event.

¹ "Waste" is very broadly defined in Water Code section 13050(d) and includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

² Supplemental Groundwater and Preliminary Soil Vapor Survey, Rancho Santa Fe Fire Department, Prepared by Ninyo and Moore, December 5, 2001.

³ The Department of Toxic Substances Control evaluated the ERM-West Supplemental Site Investigation Report, May 2010.

The recent human health risk evaluation indicates an unacceptable potential cancer risk and non-cancer hazard due to petroleum hydrocarbons in groundwater. The primary risk drivers are volatilization of methyl-*tert*-butyl ether (MTBE), total petroleum hydrocarbons (TPH), benzene, and ethylbenzene from groundwater into indoor air. The Department of Toxic Substances Control (DTSC) notified the San Diego Water Board of the human health risk evaluation. The source of the petroleum hydrocarbons is the former USTs from the RSFFD. In a letter, dated July 30, 2010, the DTSC requested that the San Diego Water Board re-open the case for further evaluation.

3. **Persons Responsible for the Discharge of Waste:** The Rancho Santa Fe Fire Department is the current property owner and former UST operator. Therefore, the Rancho Santa Fe Fire Department is the party responsible for the discharge of wastes from the USTs at the facility.
4. **Basis for Requiring a Technical Report:** Water Code section 13267 provides that the San Diego Water Board may require dischargers, past dischargers, or suspected dischargers to furnish those technical reports as the San Diego Water Board may specify, provided that the burden, including costs, of these reports, must bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In requiring the reports, the San Diego Water Board must provide the person with a written explanation regarding the need for the reports, and identify the evidence that supports requiring that person to provide the reports.
5. **Need for and Benefit of a Technical Report:** The DTSC's human health risk evaluation indicates an unacceptable potential cancer risk and non-cancer hazard due to petroleum hydrocarbons in groundwater. A human health risk assessment is needed to provide information to the San Diego Water Board regarding the threat to public health posed by the discharge, and to determine if additional cleanup is needed to reduce the risk to acceptable levels, or if control measures are needed to reduce the risk to residences and school facilities. The technical report will enable the San Diego Water Board to determine if the discharge poses a threat to human health in the vicinity of the Site, and provide technical information to determine what measures, if any, are needed to protect human health from the discharge. Based on the nature and possible consequences of the discharge (as described in Findings No. 1 through 4, above) the burden, including costs, of providing the required reports bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.
6. **California Environmental Quality Act Compliance:** The issuance of this Order is an enforcement action taken by a regulatory agency and is

categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to section 15321(a) (2), Chapter 3, Title 14 of the California Code of Regulations. This Order requires submittal of a detailed work plan that addresses risks to public health within the Site vicinity. The proposed activities under the work plan are not yet known, but implementation of the work plan may result in significant physical impacts to the environment that must be evaluated under CEQA. The appropriate lead agency will address the CEQA requirements prior to implementing any work plan that may have a significant impact on the environment.

7. **Qualified Professionals:** The Rancho Santa Fe Fire Department's reliance on qualified professionals promotes proper planning, implementation, and long-term cost-effectiveness of investigation, and cleanup and abatement activities. Professionals should be qualified, licensed where applicable, and competent and proficient in the fields pertinent to the required activities. California Business and Professions Code sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgments be performed by or under the direction of licensed professionals.

IT IS HEREBY ORDERED, pursuant to section 13267 of the Water Code, the RSFFD (hereinafter the Discharger) is required to comply with the following directives:

A. Human Health Risk Assessment

1. **Human Health Risk Assessment Work Plan:** The Discharger must submit to the San Diego Water Board by 5:00 p.m. on **December 16, 2010**, a work plan adequate to guide the collection of information needed to produce a human health risk assessment report as described in Directive A.2.
 - a. Activity Completion Schedule: The work plan must include a schedule for completion of all activities and submission of a human health risk assessment report described in Directive A.2.
 - b. Work Plan Implementation: The Discharger must begin to implement the work plan no later than **30 days** after submission of the work plan and according to the activities completion schedule contained in the work plan, unless otherwise directed in writing by the San Diego Water Board. Before beginning these activities the Discharger must:
 - i. Notify the San Diego Water Board of the intent to initiate the proposed actions included in the work plan submitted; and
 - ii. Comply with any conditions set by the San Diego Water Board.

c. San Diego Water Board Notification: The Discharger must give the San Diego Water Board notification at least one week before the start of fieldwork, if any.

2. **Human Health Risk Assessment Report**: The Discharger must submit a *Human Health Risk Assessment Report (Report)* describing the results of the risk assessment. The Report is due no later than 5:00 p.m. on **February 27, 2010**, and must contain the following information:

- a. Site Conceptual Model: The Report must contain a Site Conceptual Model (SCM) that provides a written or pictorial representation of the release scenario and the likely distribution of waste as well as potential pathways and receptors. The SCM must identify and describe the types of wastes present including their distribution in space and time, and how the wastes are changing in space and time. In addition the SCM must identify the potential, current, and future receptors in the area; link potential sources to potential receptors through transport of wastes in the air, soil, and water; and identify the fate and transport characteristics of the site. It should describe or show the physical characteristics and properties of the subsurface and identify the environmental issues that need to be investigated (and those issues that do not need to be addressed).
- b. Field Methodologies: The Report must describe the field methodologies used for any drilling; soil sampling, groundwater sampling, well and soil vapor probe construction, geophysical surveys, and other activities. Selected methods for purging and sampling monitoring wells and soil vapor probes must be capable of providing representative samples for detecting all of the waste constituents.
- c. Chemical Analyses: The Report must describe the laboratory analytical methods and protocols used for each environmental medium including soil, soil vapor, and water. The suite of chemical analyses, methods and protocols must be adequate to quantitatively identify and characterize the full range of site-specific waste constituents.
- d. Sample Locations and Number: The Report must contain a site map that shows the locations, type, and number of samples. The number of samples and suite of chemical analyses must be sufficient to provide data for evaluation of the risk assessment. All monitoring data must be presented in tabular format including the sample result, sample medium, location, depth, sampling method, analyses, and rationale for the method.

- e. Human Health Risk Assessment: The Report must contain the results of a human health risk assessment for residents living adjacent to the facility. The risks from each chemical and from all applicable exposure pathways must be summed to obtain the overall screening level risk posed by chemicals discharged from the facility. The human health risk assessment must follow the DTSC 2004 Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air. The report must include data interpretations, a discussion of the level of uncertainty of conclusions, and make recommendations if additional cleanup is needed to reduce the risk to acceptable levels.

- B. PENALTY OF PERJURY STATEMENT:** All reports must be signed by the Discharger's responsible corporate officer or its duly authorized representative, and must include the following statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- C. DOCUMENT SUBMITTALS:** The Discharger must submit one electronic, searchable PDF copy of all documents required under this Order to:

Assistant Executive Officer
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, California 92123-4353
Attn: Sean McClain, Central Cleanup Unit

All correspondence and documents submitted to the San Diego Water Board must include the following Geotracker Site ID in the header or subject line:

T0607301750

D. ELECTRONIC DATA SUBMITTALS: The Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & and Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site after July 1, 2005. All information submitted to the San Diego Water Board in compliance with this Order is required to be submitted electronically via the Internet into the Geotracker database <http://geotracker.waterboards.ca.gov/> (Geotracker Site ID. **T0607301750**). The electronic data must be uploaded on or prior to the regulatory due dates set forth in the Order or addenda thereto. To comply with these requirements, the Discharger must upload to the Geotracker database the following minimum information.

- 1. Laboratory Analytical Data:** Analytical data (including geochemical data) for all soil, vapor, and water samples in Electronic Data File (EDF) format. Water, soil, and vapor data include analytical results of samples collected from: monitoring wells, boreholes, gas and vapor wells or other collection devices, surface water, groundwater, piezometers, stockpiles, and drinking water wells.
- 2. Locational Data:** 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.
- 3. Monitoring Well Elevation Data:** The surveyed elevation relative to a geodetic datum of any permanent monitoring well. Elevation measurements to the top of groundwater well casings for all groundwater monitoring wells.
- 4. Depth-to-Water Data:** Monitoring wells need to have the depth-to-water information reported whenever water data is collected, even if water samples are not actually collected during the sampling event.
- 5. Monitoring Well Screen Intervals:** The depth to the top of the screened interval and the length of screened interval for any permanent monitoring well.
- 6. Site Map:** Site map or maps which display discharge locations,⁴ streets bordering the facility, and sampling locations for all soil, water, and vapor samples. The site map is a stand-alone document that may be submitted in various electronic formats.⁵ A site map must also be

⁴ Areas related to discharge from the dry cleaners operation.

⁵ Formats include .gif, .jpeg, .jpg, .tiff, .tif, .pdf

uploaded to show the maximum extent of any groundwater pollution. An updated site map may be submitted at any time.

7. **Boring logs:** Boring logs (in searchable PDF format) prepared by an appropriately licensed professional.

E. VIOLATION REPORTS: If the Discharger violates any requirement of this Order, then the Discharger must notify the San Diego Water Board office by telephone as soon as practicable once the Discharger has knowledge of the violation. The San Diego Water Board may, depending on violation severity, require the Discharger to submit a separate technical report on the violation within five working days of telephone notification.

F. OTHER REPORTS: The Discharger must notify the San Diego Water Board in writing prior to any site activities that have the potential to cause further migration of contaminants or that would provide new opportunities for Site investigation.

G. PROVISIONS

1. **No Pollution, Contamination or Nuisance:** The storage, handling, treatment, or disposal of soil containing waste or polluted groundwater must not create conditions of nuisance as defined in Water Code section 13050(m). The Discharger must properly manage, treat and dispose of wastes and polluted groundwater in accordance with applicable federal, State and local regulations.
2. **Good Operation and Maintenance:** The Discharger must maintain in good working order and operate as efficiently as possible any monitoring system, Site or control system installed to achieve compliance with the requirements of this Order.
3. **Contractor/Consultant Qualifications:** All reports, plans and documents required under this Order must be prepared under the direction of appropriately qualified professionals. A statement of qualifications and license numbers, if applicable, of the responsible lead professional and all professionals making significant and/or substantive contributions must be included in the report submitted by the Discharger. The lead professional performing engineering and geologic evaluations and judgments must sign and affix their professional geologist or civil engineering registration stamp to all technical reports, plans or documents submitted the San Diego Water Board.
4. **Laboratory Qualifications:** All samples must be analyzed by California State-certified laboratories using methods approved by the USEPA for

the type of analysis to be performed. All laboratories must maintain QA/QC records for San Diego Water Board review.

5. **Laboratory Analytical Reports:** Any report presenting new analytical data is required to include the complete Laboratory Analytical Report(s). The Laboratory Analytical Report(s) must be signed by the laboratory director and contain:
 - a. a complete sample analytical report,
 - b. a complete laboratory QA/QC report,
 - c. a discussion of the sample and QA/QC data, and
 - d. a transmittal letter that must indicate whether or not all the analytical work was supervised by the director of the laboratory, and contain the following statement, "All analyses were conducted at a laboratory certified for such analyses by the California Department of Health Services in accordance with current USEPA procedures."
6. **Reporting of Changed Owner or Operator:** The Discharger must notify the San Diego Water Board of any changes in Site occupancy or ownership associated with the property described in this Order.
7. **Regulations:** All corrective actions must be in accordance with the provisions of CCR Title 23, Chapter 15, and the Cleanup and Abatement Policy in the Water Quality Control Plan for the San Diego Basin (9).

H. NOTIFICATIONS

1. **All Applicable Permits:** This Order does not relieve the Discharger of the responsibility of obtaining permits or other entitlements to perform necessary corrective action. This includes, but is not limited to, actions that are subject to local, state, and/or federal discretionary review and permitting.
2. **Enforcement Notification:** Failure to comply with requirements of this Order may subject you to enforcement action, including but not limited to administrative enforcement orders requiring you to cease and desist from violations, imposition of administrative civil liability, pursuant to Water Code section 13268, in an amount not to exceed \$1,000 for each day in which the violation occurs referral to the State Attorney General for injunctive relief and referral to the District Attorney for criminal prosecution.
3. **Requesting Evidentiary Hearing by the San Diego Water Board:** Any person affected by this action of the San Diego Water Board may

request an evidentiary hearing before the San Diego Water Board. The San Diego Water Board's Executive Officer may elect to hold an informal hearing or a "paper hearing" in lieu of scheduling a hearing before the San Diego Water Board itself. If either of the Responsible Parties decides to request an evidentiary hearing, they must send their request to the San Diego Water Board Executive Officer, Attn: Supervisor Central San Diego County Groundwater Unit, at the address provided on the Order transmittal letter. Please consider the following carefully:

- a. The San Diego Water Board must receive the request within 30 days of the date of this Order.
 - b. The request must include all comments, technical analysis, documents, reports, and other evidence that the Discharger wishes to submit for the evidentiary hearing. Please note, however, that the administrative record will include all materials the San Diego Water Board has previously received regarding this facility. The Discharger is not required to submit documents that are already in the record.
 - c. The Executive Officer or San Diego Water Board may deny the request for a hearing after reviewing the evidence.
 - d. If the Discharger requests an evidentiary hearing, the State Water Board may prevent them from submitting new evidence in support of a State Water Board petition.
 - e. The request for an evidentiary hearing, if the Discharger submits one, does not stay the effective date of the Order, whether or not a hearing is scheduled.
 - f. A request for a hearing does not extend the 30-day period to file a petition with the State Water Board (see below). We suggest, however, that the Discharger ask the State Water Board to hold the petition in abeyance while the request for a hearing is pending. (Refer to CCR Title 23 section 2050.5(d)) Additional information regarding the SWRCB petition process is provided below.
- 4. Requesting Administrative Review by the State Water Board:** Any person affected by this action of the San Diego Water Board may petition the State Water Board to review the action in accordance with section 13320 of the Water Code and CCR Title 23 section 2050. The petition must be received by the State Water Resources Control Board (SWRCB) (Office of Chief Counsel, P.O. Box 100, Sacramento, California 95812) within **30 calendar days** of the date of this Order.

Copies of the law and regulations applicable to filing petitions will be provided upon request.

Julie Chan

Julie Chan
Chief, Cleanup and Land Discharge Branch

October 28, 2010

Date