

ALAMEDA COUNTY  
HEALTH CARE SERVICES



AGENCY  
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES  
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July 14, 2008

Mr. Robert Heindl  
Ingersoll-Rand Company  
1495 Valley Center Parkway  
Bethlehem, PA 18017-2293

Mr. Marc Monheimer  
Marc Monheimer Et. Al. Trust  
9700 Brynwawr Avenue  
Rosemont, IL 60018

Tool Family Partnership  
1900 Marina Boulevard  
San Leandro, CA 94577-3207

Subject: Fuel Leak Case No. #RO0000017 and Geotracker Global ID TO6019758726. Ingersoll-Rand Facility, 1944 Marina Boulevard, San Leandro, California

Dear Mr. Heindl, Mr. Monheimer:

Alameda County Environmental Health (ACEH) staff has reviewed the case file and the report entitled, "Risk Based Corrective Action-Risk Assessment Work Plan", dated June 19, 2000 and prepared on your behalf by ENSR. The work plan recommends that a risk assessment should be performed to evaluate the potential human health risk associated with residual soil and groundwater contamination beneath your site.

ACEH does not concur with performing a risk assessment at this time and requests that you address the following technical comments and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to [steven.plunkett@acgov.org](mailto:steven.plunkett@acgov.org)) prior to the start of field activities.

**TECHNICAL COMMENTS**

- 1. Well Redevelopment and Monitoring Well Sampling.** Prior to groundwater sampling, the integrity of each well should be assessed to insure that each well can produce a representative sample of groundwater. In addition, prior to monitoring well sampling all onsite all site monitor wells, vapor extraction wells that intercept the water table, and any other wells (e.g., RW wells) should be rehabilitated and/or redeveloped; thus allowing the collection of a representative sample of formation groundwater. Furthermore, well redevelopment should include surging the well screen interval to remove fines from the filter pack material. Note that well redevelopment may require additional well volumes to be removed assuring that water quality parameters are satisfied. Furthermore, before the collection of groundwater samples all monitoring well locations are to be surveyed using a known datum by a licensed professional surveyor. Please describe and present the results of the well redevelopment, rehabilitation and survey activities in the report requested below.
- 2. Groundwater Sampling and Analysis.** The most recent groundwater analytical data available for the site dates back to July 1998; therefore, ACEH requests that groundwater samples must be collected from all site monitor wells, vapor extraction wells that intercept the water table, and any other wells (e.g., RW wells) that have been installed in conjunction with corrective actions at the site. This stipulation is being made due to the fact that this office has not received a groundwater monitoring report for the site in nearly ten years, and any evaluation of risk would need to consider current data. The groundwater samples must be analyzed for TPHg, BTEX, MiBE, TBA, TAME, DIPE, ETBE, EDB

Mr. Robert Heindl, Mr. Marc Monheimer  
RO0000017  
July 11, 2008

and EDC via EPA Method 8260. We recommend that groundwater samples also be collected and evaluated for general minerals, including nitrate, sulfate, iron ions, methane, dissolved oxygen, oxidation reduction potential, and total dissolved solids. Please present results from groundwater sampling in the report requested below.

3. **Critical Area Evaluation.** During a previous investigation completed in July of 1999 several geophysical anomalies were identified at the site. Groundwater samples were collected from each area identified where a geophysical anomaly was encountered; groundwater data collected during the investigation detected high levels of dissolved phase TPHg and BTEX constituents at concentrations of up to 270,000 ppb TPHg.

The conclusion that dissolved phase petroleum hydrocarbon contamination is from the UST is uncertain. Our review of historic groundwater flow direction indicates that the soil borings installed during the critical area investigation are located cross gradient of the former UST location. Please discuss in detail your evaluation of the results from the critical area investigation and present your conclusions in the report requested below.

4. **Project Approach and Investigation Reporting – Site Conceptual Model**

ACEH has determined that during the Critical Area Investigation the source of high concentrations of dissolved phase TPHg is unknown and other potential data gaps exist at your site; therefore we request that you prepare a Site Conceptual Model (SCM). A SCM is a set of working hypotheses pertaining to all aspects of the contaminant release, including site geology, hydrogeology, release history, residual and dissolved contamination, attenuation mechanisms, pathways to nearby receptors, and likely magnitude of potential impacts to receptors. The SCM is used to identify data gaps that are subsequently filled as the investigation proceeds. As the data gaps are filled, the working hypotheses are modified, and the overall SCM is refined and strengthened. Subsurface investigations continue until the SCM no longer changes as new data are collected. At this point, the SCM is said to be "validated." The validated SCM then forms the foundation for developing the most cost-effective corrective action plan to protect existing and potential receptors.

When performed properly, the process of developing, refining and ultimately validating the SCM effectively guides the scope of the entire site investigation. We have identified, based on our review of existing data, some initial key data gaps in this letter and have described several tasks that we believe will provide important new data to refine the SCM. We request that your consultant develop a SCM for this site, identify data gaps, and propose specific supplemental tasks for future investigations. There may need to be additional phases of investigations, each building on the results of the prior work, to validate the SCM. Characterizing the site in this way will improve the efficiency of the work and limit its overall cost.

The SCM approach is endorsed by both industry and the regulatory community. Technical guidance for developing SCMs is presented in API's Publication No. 4699 and EPA's Publication No. EPA 510-B-97-001 both referenced above; and "Guidelines for Investigation and Cleanup of MTBE and Other Ether-Based Oxygenates, Appendix C," prepared by the State Water Resources Control Board, dated March 27, 2000.

The SCM for this project shall incorporate, but not be limited to, the following:

- a) A concise narrative discussion of the regional geologic and hydrogeologic setting obtained from your

Mr. Robert Heindl, Mr. Marc Monheimer  
RO0000017  
July 11, 2008

background study. Include a list of technical references you reviewed, and copies (photocopies are sufficient) of regional geologic maps, groundwater contours, cross-sections, etc.

- b) A concise discussion of the on-site and off-site geology, hydrogeology, release history, source zone, plume development and migration, attenuation mechanisms, preferential pathways, and potential threat to downgradient and above-ground receptors. Be sure to include the vapor pathway in your analysis. Maximize the use of large-scale graphics (e.g., maps, cross-sections, contour maps, etc.) and conceptual diagrams to illustrate key points. Geologic cross-sections, which include an interpretive drawing of the vertical extent of soil and groundwater contamination (i.e., an interpretive drawing—not a plot of laboratory results). The SCM report requested below is to include one cross section parallel and one cross section perpendicular to the contaminant plume axis. Each cross section should include, but not be restricted to, the following:
1. Subsurface geologic features, depth to groundwater and man-made conduits.
  2. Surface topography. The cross sections should be extended off-site where necessary to show significant breaks in slope.
  3. Soil descriptions for all borings and wells along the line of section.
  4. Screen and filter pack intervals for each monitoring well.
  5. Sampling locations and results for soil and grab groundwater samples.
  6. Site features such as the tank pit, dispensers, buildings etc. Where appropriate, monitoring well location and soil boring locations will be projected back to the strike of the cross section line
- c) Identification and listing of specific data gaps that require further investigation during subsequent phases of work.
- d) Proposed activities to investigate and fill data gaps identified above.
- e) The SCM shall include an analysis of the hydraulic flow system at and downgradient from the site. Include rose diagrams for groundwater gradients. The rose diagram shall be plotted on groundwater contour maps and updated in all future reports submitted for your site. Include an analysis of vertical hydraulic gradients. Note that these likely change due to seasonal precipitation and pumping.
- f) Temporal changes in the plume location and concentrations are also a key element of the SCM. In addition to providing a measure of the magnitude of the problem, these data are often useful to confirm details of the flow system inferred from the hydraulic head measurements. Include plots of the contaminant plumes on your maps, cross-sections, and diagrams.
- g) Several other contaminant release sites exist in the vicinity of your site. Hydrogeologic and contaminant data from those sites may prove helpful in testing certain hypotheses for your SCM. Include a summary of work and technical findings from nearby release sites and incorporate the findings from nearby site investigations into your SCM.
- h) Plots of chemical concentrations vs. time and vs. distance from the source. Plots should be shown for each monitoring well, which has had detectable levels of contaminants
- i) Summary tables of chemical concentrations in each historically sampled media (including soil, groundwater and soil vapor).
- j) Boring and well logs (including construction/screening), and a summary table indicating construction specifications for each monitoring and extraction well.

Mr. Robert Heindl, Mr. Marc Monheimer  
RO0000017  
July 11, 2008

Report the information discussed above in your initial SCM and include it in the Work Plan requested below. Include updates to your SCM in the Monitoring Well Installation Report requested below.

5. **Geotracker EDF Submittals.** Pursuant to CCR Sections 2729 and 2729.1, beginning July 1, 2005 for LUST cases, all analytical data, including monitoring well samples, submitted in a report to a regulatory agency as part of the LUFT program, must be transmitted electronically to the SWRCB Geotracker website via the internet. Additionally, all permanent monitoring points utilized to collect groundwater samples (i.e. monitoring wells) and submitted in a report to a regulatory agency, must be surveyed (top of casing) to mean sea level and latitude and longitude accurate to within 1-meter accuracy, using NAD 83, and transmitted electronically to the SWRCB Geotracker website. Beginning July 1, 2005, electronic submittal of a complete copy of all reports (LUFT or SLIC) is required in Geotracker (in PDF format). Please upload all analytical data collected after July 1, 2005 to the SWRCB's Geotracker database website in accordance with the above-cited regulation.

#### **REQUEST FOR INFORMATION**

ACEH's case file for the subject site contains only the electronic reports as listed on our website (<http://www.acgov.org/aceh/lop/ust.htm>). You are requested to submit copies of all other reports related to environmental investigations for this property (including Phase 1 reports) by **July 28, 2008**.

#### **LANDOWNER NOTIFICATION REQUIREMENTS**

Pursuant to California Health & Safety Code Section 25297.15, the active or primary responsible party for a fuel leak case must inform all current property owners of the site of cleanup actions or requests for closure. Furthermore, ACEH may not consider any cleanup proposals or requests for case closure without assurance that this notification requirement has been met. Additionally, the active or primary responsible party is required to forward to ACEH a complete mailing list of all record fee title holders to the site.

At this time we require that you submit a complete mailing list of all record fee title owners of the site by May 15, 2008, which states, at a minimum, the following:

A. *In accordance with section 25297.15(a) of Chapter 6.7 of the Health & Safety Code, I, (name of primary responsible party), certify that the following is a complete list of current record fee title owners and their mailing addresses for the above site:*

- OR -

B. *In accordance with section 25297.15(a) of Chapter 6.7 of the Health & Safety Code, I, (name of primary responsible party), certify that I am the sole landowner for the above site.*

*(Note: Complete item A if there are multiple site landowners. If you are the sole site landowner, skip item A and complete item B.)*

In the future, for you to meet these requirements when submitting cleanup proposals or requests for case closure, ACEH requires that you:

1. Notify all current record owners of fee title to the site of any cleanup proposals or requests for case closure;
2. Submit a letter to ACEH which certifies that the notification requirement in 25297.15(a) of the Health and Safety Code has been met;

Mr. Robert Heindl, Mr. Marc Monheimer  
RO0000017  
July 11, 2008

3. Forward to ACEH a copy of your complete mailing list of all record fee title holders to the site; and
4. Update your mailing list of all record fee title holders, and repeat the process outlined above prior to submittal of any additional *Corrective Action Plan* or your *Request for Case Closure*.

Your written certification to ACEH (Item 2 above) must state, at a minimum, the following:

A. *In accordance with Section 25297.15(a) of the Health & Safety Code, I, (name of primary responsible party), certify that I have notified all responsible landowners of the enclosed proposed action. (Check space for applicable proposed action(s)):*

*cleanup proposal (Corrective Action Plan)*

*request for case closure*

*local agency intention to make a determination that no further action is required*

*local agency intention to issue a closure letter*

- OR -

B. *In accordance with section 25297.15(a) of Chapter 6.7 of the Health & Safety Code, I, (name of primary responsible party), certify that I am the sole landowner for the above site.*

*(Note: Complete item A if there are multiple site landowners. If you are the sole site landowner, skip item A and complete item B.)*

### **TECHNICAL REPORT REQUEST**

Please submit technical reports to Alameda County Environmental Health (Attention: Steve Plunkett)

- **July 28, 2008** – Additional Environmental Investigation Reports (Request for Information)
- **September 15, 2008** – Site Conceptual Model and Groundwater Monitoring Report.

This report is being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

### **ELECTRONIC SUBMITTAL OF REPORTS**

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning

Mr. Robert Heindl, Mr. Marc Monheimer  
RO0000017  
July 11, 2008

July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in Geotracker (in PDF format). Please visit the State Water Resources Control Board for more information on these requirements ([http://www.swrcb.ca.gov/ust/electronic\\_submittal/report\\_rqmts.shtml](http://www.swrcb.ca.gov/ust/electronic_submittal/report_rqmts.shtml)).

### **PERJURY STATEMENT**

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

### **PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS**

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

### **UNDERGROUND STORAGE TANK CLEANUP FUND**

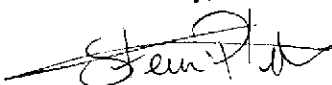
Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

### **AGENCY OVERSIGHT**

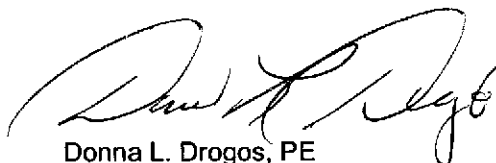
If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

If you have any questions, please call Steve Plunkett at (510) 383-1767.

Sincerely,



Steven Plunkett  
Hazardous Materials Specialist



Donna L. Drogos, PE  
Supervising Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

Mr. Robert Heindl, Mr. Marc Monheimer  
RO0000017  
July 11, 2008

Cc: Mark Capps,  
ENSR  
10461 Old Placerville Road, Suite 170  
Sacramento, CA 95827

<b>Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)</b>	<b>ISSUE DATE:</b> July 5, 2005
	<b>REVISION DATE:</b> December 16, 2005
	<b>PREVIOUS REVISIONS:</b> October 31, 2005
<b>SECTION:</b> Miscellaneous Administrative Topics & Procedures	<b>SUBJECT:</b> Electronic Report Upload (ftp) Instructions

Effective **January 31, 2006**, the Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

#### REQUIREMENTS

- Entire report including cover letter must be submitted to the ftp site as a **single portable document format (PDF) with no password protection**. (Please do not submit reports as attachments to electronic mail.)
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements **must** be included and have either original or electronic signature.
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:  
RO#\_Report Name\_Year-Month-Date (e.g., RO#5555\_WorkPlan\_2005-06-14)

#### Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in **Excel** format. These are for use by assigned Caseworker only.

#### Submission Instructions

- 1) Obtain User Name and Password:
  - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
    - i) Send an e-mail to [dehloptoxic@acgov.org](mailto:dehloptoxic@acgov.org)  
or
    - ii) Send a fax on company letterhead to (510) 337-9335, to the attention of Alicia Lam-Finneke.
  - b) In the subject line of your request, be sure to include "**ftp PASSWORD REQUEST**" and in the body of your request, include the **Contact Information, Site Addresses, and the Case Numbers (RO# available in Geotracker) you will be posting for.**
- 2) Upload Files to the ftp Site
  - a) Using Internet Explorer (IE4+), go to <ftp://alcoftp1.acgov.org>
    - (i) Note: Netscape and Firefox browsers will not open the FTP site.
  - b) Click on File, then on Login As.
  - c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
  - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
  - e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.
- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
  - a) Send email to [dehloptoxic@acgov.org](mailto:dehloptoxic@acgov.org) notify us that you have placed a report on our ftp site.
  - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name at acgov.org. (e.g., [firstname.lastname@acgov.org](mailto:firstname.lastname@acgov.org))
  - c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload)