

**BLYMYER**  
ENGINEERS, INC.

1829 Clement Avenue

Alameda, California 94501-1396

(510) 521-3773 FAX: (510) 865-2594

LETTER OF TRANSMITTAL

|            |                        |             |       |
|------------|------------------------|-------------|-------|
| DATE       | May 27, 1999           | BEI Job No. | 98078 |
| ATTENTION: | Mr. Russell Vincent    |             |       |
| SUBJECT:   | 1372 Ocean Avenue      |             |       |
|            | Emeryville, California |             |       |
|            |                        |             |       |
|            |                        |             |       |

Russell Vincent Construction

855 Keeler Avenue

Berkeley, CA 94708

**We are sending you**

- Invoice
- Copy of letter

- Report
- Prints
- Plans

- Work Order
- Change Order

- Specifications

\_\_\_\_\_

| Copies | Date    | Number | Description                                                                                 |
|--------|---------|--------|---------------------------------------------------------------------------------------------|
| 1      | 1/15/99 |        | <i>Risk Management and Soil and Groundwater Management Plans For Residual Contamination</i> |
|        |         |        |                                                                                             |
|        |         |        |                                                                                             |
|        |         |        |                                                                                             |
|        |         |        |                                                                                             |
|        |         |        |                                                                                             |

**These are transmitted as checked below:**

- For signature
- For payment
- As requested
- For approval
- FOR BIDS DUE
- Approved as submitted
- Approved as noted
- Returned for Corrections
- For review and comment
- For your use
- Resubmit \_\_\_ copies for approval
- Submit \_\_\_ copies for distribution
- Return \_\_\_ corrected prints

|                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| REMARKS: For your use. As we discussed recently after repeated phone calls to ACHCSA, we have not yet received either comments or approval from Susan Hugo at the ACHCSA on these plans. However, as your project is proceeding and final closure is contingent upon recording the approved plans, we are forwarding the existing plans in the event ACHCSA should eventually respond. |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

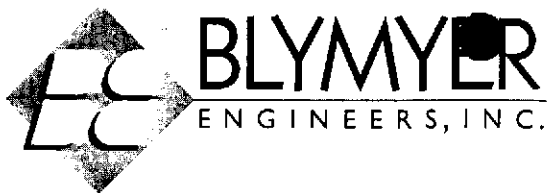
COPY TO: File  
Ms. Susan Hugo, ACHCSA  
Ms. Madhulla Logan, ACHCSA

99 MAY 28 PM 4:46

SIGNED: Mark Detterman

PROTECTION  
ENVIRONMENTAL

If enclosures are not as noted, kindly notify Blymyer Engineers, Inc. at once.



January 15, 1999  
BEI Job No. 98078

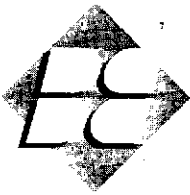
Mr. Russell Vincent  
Russell Vincent Construction  
855 Keeler Avenue  
Berkeley, CA 94708

**Subject: Risk Management and Soil and Groundwater Management  
Plans For Residual Contamination  
1372 Ocean Avenue  
Emeryville, California  
STID # 6449**

Dear Mr. Vincent:

At the request of the Alameda County Health Care Services Agency (ACHCSA), Blymyer Engineers, Inc. has generated the enclosed Risk Management Plan (RMP) and Soil and Groundwater Management Plan (SGMP). The ACHCSA has approved the Health Risk Assessment (HRA) generated by Blymyer Engineers, entitled *ASTM RBCA Health Risk Assessment*, dated August 24, 1998, and modified by the report entitled *Modifications to Health Risk Assessment*, dated October 21, 1998. To generate the HRA, Blymyer Engineers used the modeling program entitled *RBCA Tool Kit*, Version 1.0.1, by Groundwater Sciences, Inc. of Houston, Texas, which employs equations directly out of the American Society for Testing and Materials (ASTM) 1739-95 document entitled *Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites*, dated November 1995.

The HRA demonstrated that, with conservative assumptions employed in the modeling, the known residual petroleum hydrocarbons in soil and groundwater and volatile organic compound contaminants in groundwater could be allowed to remain in place without increasing health risks to site and vicinity residents over a 70-year period of time. The ACHCSA requested the use of average (mean) contaminant concentrations in the generation of the HRA. This was incorporated into the report entitled *Modifications to Health Risk Assessment*. This moderates the highest contaminant concentrations found in the subsurface environment; however, should subsurface excavation work be conducted in the vicinity of the documented contamination for any reason in the future, the workers or residents will have the potential to be exposed to the currently isolated peak contaminant concentrations. It is important to note that the documented contaminant concentrations in soil and groundwater are significantly below (one to several orders of magnitude below) the Permissible Exposure Limits (PELs) of each chemical and even upon assuming 100% volatilization of all contaminants exposed during excavation there is no increased risk over the relatively brief period of work. The report entitled *ASTM RBCA Health Risk Assessment*, utilized the 95% upper confidence level of contaminant concentrations (95% of maximum documented concentrations) and results in the use of higher contaminant concentrations in the risk assessment process than the mean generates with no perceived health risk above acceptable levels over a 70-year life span. This demonstrates that a significant margin of safety exists should a higher concentration be encountered during excavation.



Mr. Russell Vincent  
January 15, 1999  
Page 2

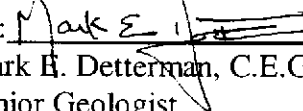
The RMP was requested by the ACHCSA to document and track known locations of contamination until such time as the residual sources have been removed from the site in order that future owners can acknowledge the contamination and be responsible for taking adequate protective measures. The SGMP was also requested by the ACHCSA in order to detail adequate soil and groundwater handling procedures for contaminated materials upon removal from current locations. As both versions of the risk assessment demonstrate, there is not a health risk to construction workers or residents from the contaminants; however, the materials should be assumed to require disposal as a special waste until otherwise documented.

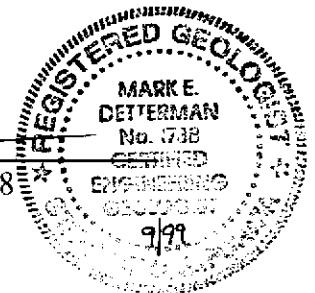
Both plans have been required by the ACHCSA to be transmitted via documentable means with site property documents by current and future property owner(s) to all future property owners until the contamination has been documented to have been removed from the site through either active remediation such as excavation, or passive remediation, such as natural biodegradation. Both plans are intended to be attached to the deed as a recorded Deed Notification. The Deed Notification will be fully removable once contamination has been documented to have been removed from the site in some manner.

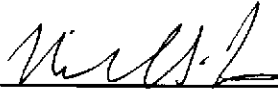
Should you have any questions or comments regarding this project please call Mark Detterman at (510) 521-3773.

Sincerely,

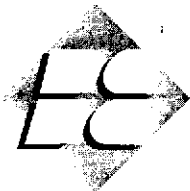
Blymyer Engineers, Inc.

By:   
Mark E. Detterman, C.E.G. 1788  
Senior Geologist



And:   
Michael S. Lewis  
Vice President, Technical Services

Enclosure: Risk Management Plan with signatory sheet, 3 pages



## Risk Management Plan

1372 Ocean Avenue  
Emeryville, California

### Principal Available Site Contaminant Documentation

*Subsurface Investigation Related to a Suspected Underground Storage Tank Location* and cover letter entitled *Letter Report describing a subsurface investigation related to a suspected underground storage tank location*, May 7, 1997, International Geologic, unpublished consultant report for Plant Insulation Company, 9 pages, 1 figures, 2 tables, 1 attachment.

*Groundwater Monitoring Well Installation Report*, December 12, 1997, International Geologic, unpublished consultant report for Plant Insulation Company, 9 pages, 2 tables, 3 figures, 3 attachments.

*The EDR-Radius Map with GeoCheck for 1372 Ocean Ave. Emeryville, CA 94608*, March 31, 1998, Environmental Data Resources, Inc., unpublished consultant report International Geologic, attached to following report.

*Summary Report Phase I Site Assessment*, April 29, 1997, International Geologic, unpublished consultant report for Plant Insulation Company, 18 pages, 1 table, 5 figures, 8 pages photos.

*Second Quarter Groundwater Monitoring Report*, July 15, 1998, International Geologic, unpublished consultant report for Plant Insulation Company, 6 pages, 2 tables, 2 figures, 2 attachments.

*ASTM RBCA Health Risk Assessment*, August 24, 1998, Blymyer Engineers, Inc., unpublished consultant report for Plant Insulation Company, 8 pages, 2 figures, 7 appendices.

*Third Quarter Groundwater Monitoring Report*, September 15, 1998, International Geologic, unpublished consultant report for Plant Insulation Company, 6 pages, 2 tables, 2 figures, 2 attachments.<sup>1</sup>

*Modifications to Health Risk Assessment*, October 21, 1998, Blymyer Engineers, Inc., unpublished consultant report for Plant Insulation Company, 2 pages, 7 appendices.

*Conditional Closure for the Property Located at 1372 Ocean Avenue*, November 6, 1998, Alameda County Health Care Services Agency, 2 pages.

*Risk Management and Soil and Groundwater Management Plans For Residual Contamination*, December 7, 1998, Blymyer Engineers, Inc., unpublished consultant letter for Plant Insulation Company, 6 pages, including cover letter.

*1372 Ocean Avenue, Emeryville, California*, December 9, 1998, International Geologic, unpublished consultant letter to Blymyer Engineers, Inc., 4 pages.

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<sup>1</sup> This report was not available for use in generation of risk assessment but is included here for the sake of completeness.



## Risk Management and Soil and Groundwater Management Plans

1372 Ocean Avenue  
Emeryville, California

### Synopsis of Site Contamination

Actions described in this paragraph were largely taken directly from the International Geologic report dated July 15, 1998, and entitled *Second Quarter Groundwater Monitoring Report*. During preparations for the sale of the subject property, a suspected former fuel dispenser island was identified against the west fence in the yard area. The former property owner, Mr. Doug Ralston of Plant Insulation Company, had no knowledge of an underground storage tank (UST) at the property. Subsequent subsurface geophysical locating techniques failed to locate an UST at the site. On March 31, 1997, the suspected UST and dispenser locations were investigated by excavation. An uncapped abandoned product line and large sections of broken concrete slab were encountered in the excavation that reached an approximate maximum depth of 4 feet below grade surface (bgs) in an area of approximately 15 by 15 feet. An UST was not discovered in the explorations. On April 10, 1997, a soil sample was collected from a depth of approximately 5.5 bgs in a hand-augured bore (B-1) placed in the excavation area. A groundwater sample was additionally collected at a depth of approximately 6.5 bgs. Soil excavated during the exploration for the UST was subsequently reused in the excavation, while the concrete was removed from the site. Due to the elevated concentrations of petroleum hydrocarbons and volatile organic compounds encountered in the hand bore, groundwater monitoring well MW-1 (SB-1) was installed on October 11, 1997. More detailed descriptions of the data generated may be found in the references cited above.

At the time of the generation of the Blymyer Engineers *ASTM RBCA Health Risk Assessment*, three quarters of groundwater sampling of well MW-1 had occurred. The risk assessment was conducted as a consequence of the pending sale and redevelopment of the property into a live-work community. The health risk assessment found that the residual concentrations did not pose a significant increased health risk with the conservative assumptions employed in the modeling using the mean and the 95% upper confidence level of contaminant concentrations encountered at the site in the current physical condition for future residential inhabitants of the property. The Alameda County Health Care Services Agency (ACHCSA) requested that a Risk Management Plan (RMP) be prepared as potential peak contaminant concentrations may pose a health risk to workers handling soil or groundwater or to residents exposed to volatile organic compounds released at the time of an excavation. The Soil and Groundwater Management Plan (SGMP) was also requested by the ACHCSA in order to detail adequate soil and groundwater handling procedures for contaminated materials upon removal from current locations.



## Risk Management and Soil and Groundwater Management Plans

1372 Ocean Avenue  
Emeryville, California

### Risk Management and Soil and Groundwater Management Plans

In the event of a permanent modification of the below grade physical condition of the subject property (such as a permanent excavation or grade lowering) specifically in the vicinity of documented contaminated soil in the vicinity of the former UST system (Figure 1), or the generation of groundwater from beneath the site, appropriate health and safety procedures will be followed in order that the materials will be handled appropriately. Even upon assuming 100% volatilization of all contaminants exposed during excavation there is no increased risk over a relatively brief period of work as documented contaminant concentrations in soil and groundwater are significantly below (one to several orders of magnitude below) the Permissible Exposure Limits (PELs) of each chemical; however, as a potential exists for discovery of unexpected concentrations of petroleum hydrocarbon impacted soil in the vicinity of the former UST system, a Health and Safety Plan (HSP) will be generated should that event occur. The HSP will require methods which will ensure the health and safety of the workers and residents from the risk of peak contaminant exposure the proposed work may generate. Such issues as air monitoring, special handling procedures of derived materials, and the use of appropriate contaminant zones, protective clothing, equipment, and procedures shall be addressed as pertinent. The HSP will be signed by a professional familiar with health and safety issues.

As documented in the *ASTM RBCA Risk Assessment and Modifications to Health Risk Assessment* reports, contaminant concentrations as presently understood in soil and groundwater at the subject site do not pose a health risk to either construction or residential receptors should these media be encountered and excavated during property modification. However, all UST vicinity soil and all groundwater beneath the site will be assumed to require special handling once the media are removed from the subsurface and for documented disposal, until otherwise documented. As currently understood, all groundwater encountered under the subject site would be anticipated to be impacted by either petroleum hydrocarbons or volatile organic compounds (VOCs) and should be stored or handled as appropriate until otherwise documented. Soil within the area of the former UST system (inclusive of UST and dispenser system; see Figure 1) would require handling for petroleum hydrocarbons and VOCs, until otherwise documented. As understood, soil outside of the former UST system location would not require any special handling for disposal, unless otherwise discovered or documented.

Typical handling techniques for soil include placing heavy plastic sheeting over and beneath excavated soil to minimize volatilization of contaminants and infiltration of water. Typical handling techniques for smaller quantities of groundwater include the drumming of groundwater. Should larger quantities of groundwater be generated alternative handling procedures may be more appropriate and cost-effective. Subsequent collection of representative samples of each medium for the appropriate laboratory analysis should follow standard sampling procedures and guidelines. Collection and documentation of the samples and of proper disposal of the generated material will be overseen by a Registered Geologist or a Professional Engineer. This constitutes the SGMP.

Additional mitigative actions and precautions are outlined in the November 6, 1998, ACHCSA letter referenced above. Those actions and precautions are herein incorporated by reference.



# Risk Management and Soil and Groundwater Management Plans

1372 Ocean Avenue  
Emeryville, California

The aforementioned RMP is acceptable to the undersigned and will be transmitted to all future property owners by a documentable means, specifically Deed Notification.

\_\_\_\_\_  
Russell Vincent  
1372 Ocean Avenue LLC

Date \_\_\_\_\_

\_\_\_\_\_

Date \_\_\_\_\_

\_\_\_\_\_

Date \_\_\_\_\_

Sworn to and subscribed before me This \_\_\_\_\_ Day of \_\_\_\_\_ 19\_\_

\_\_\_\_\_  
(Notary Public) My Commission Expires \_\_\_\_\_

Sworn to and subscribed before me This \_\_\_\_\_ Day of \_\_\_\_\_ 19\_\_

\_\_\_\_\_  
(Notary Public) My Commission Expires \_\_\_\_\_