

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



RO# 1052

ENVIRONMENTAL HEALTH SERVICES  
ENVIRONMENTAL PROTECTION  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
(510) 567-6700  
FAX (510) 337-9335

August 25, 1997

STID#: 3604

Mr. Gary King  
Project Coordinator  
5157 Brophy Drive  
Fremont, CA 94536

**Subject: Proposed Workplan for Destruction of Existing  
Monitoring Wells on Site Located at 16525 Worthley  
Drive, San Lorenzo, CA 94580**

Dear Mr. King:

This office has received and reviewed the aforementioned workplan, submitted by Epigene Geologists, your consultant of record, for destruction of the monitoring wells located at the above site. Thank you for the prompt attention given the requests of this office.

Following review of the document, this office concurs with the workplan as submitted. You may implement the workplan immediately. Upon completion of the tasks as outlined in the plan, a closure letter will be sent to you, barring any unforeseen problems.

Please give this office forty-eight (48) hours notice **prior** to commencing any work at the site. If you have any questions please call this office. The telephone number is (510) 567-6737.

Sincerely,

Brian P. Oliva, REHS, REA  
Hazardous Materials Specialist

c. Epigene International, 38750 Paseo Padre Parkway, Suite A-11,  
Fremont, CA 94536

BC

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



RO# 1052

StId 3604/lop  
March 10, 1997

ENVIRONMENTAL HEALTH SERVICES  
ENVIRONMENTAL PROTECTION (LOP)  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
(510) 567-6700  
FAX (510) 337-9335

Attn: Anthony Varni  
Cosmas, Ltd., A California Corp.  
14 Mirada Rd.  
Half Moon Bay CA 94019

Attn: Richard Ernest  
Crown Metal Manuf. Co., Inc.  
765 South State Route 83  
Elmhurst IL 60126-4700

Elise Varon  
765 S Route 83  
Elmhurst IL 60126

**Subject: Well destruction request for Crown Metal Manufacturing and Pacific International Steel located at 16525 Worthley Dr., San Lorenzo CA 94580**

The Alameda County Department of Environmental Health, Environmental Protection Division and the San Francisco Regional Water Quality Control Board have reviewed the case closure summary for the above referenced site and concur that no further action related to the release(s) from the former underground storage tanks is required at this time.

Please be advised that if there are no plans to continue groundwater monitoring, the eight (8) groundwater monitoring wells (designated as MW-1, MW-2, MW-4, MW-5, MW-6, MW-7, MW-8, and RW-1) at the site must be properly decommissioned before our agency will issue the Remedial Action Completion Certification (closure letter). A report must be submitted to this office documenting the abandonment of the monitoring wells or a letter stating your intentions to continue groundwater monitoring at the site.

Well destruction permits may be obtained from Alameda County Flood Control and Water Conservation, Zone 7. Their telephone number is (510)484-2600. Additionally, you will need to notify this office 72 hours in advance of the well abandonment field activities.

Please call me at (510)567-6755 if you have questions.

Sincerely,

Amy Leech  
Hazardous Materials Specialist

c: Kevin Graves, RWQCB  
Cheryl Gordon, SWRQB  
ALL/File

ALAMEDA COUNTY  
HEALTH CARE SERVICES



AGENCY  
DAVID J. KEARS, Agency Director

201058 cc

RAFAT A. SHAHID, Assistant Agency Director

STID 3617

DEPARTMENT OF ENVIRONMENTAL HEALTH  
80 Swan Way, Rm. 210  
Oakland, CA 94621  
(510) 271-4300

August 29, 1996

Mr. Don Bednarz  
General Services Administration, Region 9  
525 Market Street  
San Francisco, CA 94105-2799

RE: OAKLAND FEDERAL BUILDING, 1305 CLAY STREET, OAKLAND, CA 94612

Dear Mr. Bednarz:

This office and the Regional Water Quality Control Board (RWQCB) have reviewed the case closure summary for the above referenced site and concur that no further action related to the underground tank release is required at this time. Before a remedial action completion letter is sent, the one onsite monitoring well (MW-1) should be decommissioned. Please notify this office upon completion of well destruction so a closure letter can be issued.

Information on the proper procedures for the decommissioning of monitoring wells may be obtained from Alameda County Water District - Zone 7 at (510)484-2600.

If you have any questions, please feel free to call me at (510)567-6880.

Sincerely,

Dale Klettke, CHMM  
Hazardous Materials Specialist

- c: Thomas Peacock, LOP Manager—files  
Mr. Mark Tortorich, GSA, Region 9, 525 Market Street, San Francisco, CA  
94105-2799  
Bill Copeland, Woodward-Clyde, 500 12th Street, Suite 100, Oakland, CA 94607-4014  
Andrew Clark-Clough, City of Oakland, 1330 Broadway, Suite 1001, Oakland, CA 94612  
Lois Parr, City of Oakland, 1333 Broadway, 9th Floor, Oakland, CA 94612

3617mwde.dkt

Be

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



RO#1052

Alameda County CC4580  
Environmental Health Services  
1131 Harbor Bay Pkwy., #250  
Alameda CA 94502-6577  
(510)567-6700 FAX(510)337-9335

StId 3604

June 3, 1996

Attn: Anthony Varni  
COSMAS, Ltd., A California Corp.  
14 Mirada Rd  
Half Moon Bay CA 94019

**Subject: Investigations at 16525 Worthley Drive, San Lorenzo, CA**

Dear Mr. Varni:

This office has reviewed Epigene International's work plan, dated May 17, 1996. This work plan proposes to complete a soil and groundwater investigation downgradient of the former underground storage tank (UST) pit at the subject site using direct push technology. This work plan is acceptable to this office with the following comments/additions:

1. Soil samples must be collected every five feet, at changes in lithology, and at the soil-groundwater interface. Laboratory analyses should be performed on soil samples where contamination is suspected and the sample collected from the soil-groundwater interface. Include the logs of all soil borings in the final report.
2. In addition to Total Petroleum Hydrocarbons as gasoline (TPHg) and BTEX, soil and groundwater samples must also be analyzed for Methyl Tertiary Butyl Ether (MTBE). MTBE can be quantified using EPA method 8020.

Please notify this office at least 72 hours before field work begins. Field work should commence within the next 30 days. A report must be submitted within 45 days after the completion of this phase of work at the site. If you have questions, please call me at (510)567-6755.

Sincerely,

Amy Leech  
Hazardous Materials Specialist

c: John Alt, Epigene International, 38750 Paseo Padre Parkway, Suite A-11, Fremont, CA 94536  
Gary King, Tri-City Properties, 5157 Brophy Dr., Fremont CA 94536  
Gordon Coleman-File(ALL)

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



RO#1052

Alameda County CC4580  
Environmental Health Services  
1131 Harbor Bay Pkwy., #250  
Alameda CA 94502-6577  
(510)567-6700 FAX(510)337-9335

StId 3604

May 9, 1996

Attn: Anthony Varni  
COSMAS, Ltd., a California Corp.  
14 Mirada Rd  
Half Moon Bay CA 94019

Subject: Investigations at 16525 Worthley Drive, San Lorenzo, CA

Dear Mr. Varni:

This office has reviewed a letter from Gary King, dated May 2, 1996, and the First Quarter 1996 Monitoring Report, dated April 29, 1996, for the subject site. Mr. King requested that this office consider the subject site for closure. As stated in our March 29, 1996 letter (see attached), the extent of groundwater contamination emanating from the former tank pit downgradient and toward the surface water canal must be evaluated to confirm that there is no impact to the surface water canal. Per the San Francisco Bay Regional Water Quality Control Board's Interim Guidance on Required Cleanup at Low Risk Fuel Site, dated January 5, 1996, in order to consider this site as a low risk groundwater case, investigations must confirm that the plume is stable in the downgradient direction and that sensitive receptors (e.g., the surface water canal) are not impacted.

Please submit to this office no later than May 28, 1996, a work plan or work plan addendum as outlined in the March 29, 1996, letter. Please contact me at (510)567-6755 if you have questions or comments.

Sincerely,

Amy Leech  
Hazardous Materials Specialist

**ATTACHMENT**

c: Mr. Gary King, Tri-City Properties, 5157 Brophy Dr., Fremont CA 94536 w/attachment  
Gordon Coleman-File(ALL)

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



RO# 1052  
RAFAT A. SHAHID, DIRECTOR

StId 3604

March 29, 1996

Attn: Anthony Varni  
COSMAS, Ltd., a California Corp.  
14 Mirada Rd  
Half Moon Bay CA 94019

DEPARTMENT OF ENVIRONMENTAL HEALTH  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577  
(510) 567-6777

Subject: Investigations at 16525 Worthley Drive, San Lorenzo, CA

Dear Mr. Varni:

This office requested in our letter dated August 7, 1995, that you submit an addendum to Lowney Associates' work plan dated January 6, 1995 to include the installation of at least one permanent monitoring well located downgradient (south to southwest) from monitoring well RW-1 at the subject site. This well was to further characterize the extent of groundwater contamination emanating from the site toward the surface water canal located downgradient from the former tank pit. Mr. Gary King met with me on December 15, 1995, to request if an investigation using hydropunch technology would be acceptable in lieu of a permanent monitoring well.

I discussed the merit of a hydropunch investigation versus a permanent monitoring well in regard to this site with Kevin Graves, Associate Water Resources Control Engineer with the San Francisco Bay Regional Water Quality Control Board (SFRWQCB), on February 13, 1996. It was Mr. Graves opinion that the installation of properly placed permanent monitoring well(s) located in the downgradient direction (i.e., south to southwest) of the former tank pit would provide the data necessary to determine whether the contaminant plume is stable and if petroleum hydrocarbons emanating from the site are significantly impacting the surface water canal.

However, he concurred that your proposal of a hydropunch investigation or placement of temporary wells downgradient from the former tank pit could provide useful preliminary data. Upon receipt and evaluation of the data derived from the hydropunch or temporary well investigation, a determination would be made regarding the need for and proper placement of permanent groundwater monitoring well(s) downgradient from the former tank pit.

**Please submit to this office within 30 days, or by April 30, 1996, a work plan or an addendum to Lowney Associates' work plan dated January 6, 1995, that proposes to complete a groundwater investigation south to southwest of the former tank pit by either: 1) installation of a permanent monitoring well or 2) completion of a preliminary groundwater investigation via the installation of at least two sample locations using direct push technology or installation of temporary wells.**

Please be aware that quarterly reports for this site have not been submitted to this office since September 1995 for the third quarter of 1995. Failure to collect groundwater monitoring data undermines efforts to accurately delineate the direction and extent of contaminant migration at your site. **In addition to the work plan, please submit the quarterly reports for fourth quarter 1995 and first quarter 1996 by April 30, 1996.**

Varni

Re: 16525 Worthley Dr.

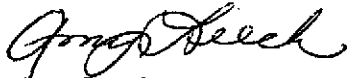
March 29, 1996

Page 2 of 2

As I discussed with Mr. King on December 15, 1995, based on the findings of the groundwater investigation downgradient of the former tank pit, this site may be eligible to apply for case closure. For your reference, please find enclosed the SFRWQCB's "Interim Guidance on Required Cleanup at Low Risk Fuel Sites". This site will need to meet the six point definition of a "Low Risk Groundwater Case" in order to qualify for closure.

Please contact me at (510)567-6755 if you have questions or comments.

Sincerely,



Amy Leech

Hazardous Materials Specialist

**ATTACHMENT**

*JS*

c: Mr. Gary King, Tri-City Properties, 5157 Brophy Dr., Fremont CA 94536 *w/attachment*  
Gordon Coleman-File(ALL)

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY

DAVID J. KEARS, Agency Director



R01052

RAFAT A. SHAHID, Director

StId 3604

August 7, 1995

DEPARTMENT OF ENVIRONMENTAL HEALTH  
Environmental Protection Division  
1131 Harbor Bay Parkway, #250  
Alameda, CA 94502-6577  
(510) 567-6700

Attn: Anthony Varni  
COSMAS, Ltd., a California Corp.  
14 Mirada Rd  
Half Moon Bay CA 94019

Subject: Investigations at 16525 Worthley Drive, San Lorenzo, CA

Dear Mr. Varni:

This office is in receipt of a letter from your consultant, Lowney Associates, dated June 6, 1995. In this letter Lowney Associates proposes to alter their workplan, dated January 6, 1995, for the subject site. This office had approved that workplan with conditions on January 26, 1995.

The letter dated June 6th proposes that one monitoring well be installed downgradient of the former underground storage tank (UST) pit or two "grab" groundwater samples be collected downgradient from the UST pit via the installation of two hydropunches. After a review of this case and a telephone conference with Stason Foster of Lowney Associates on August 1, 1995, this office requests the following:

1. Quarterly reports for this site have not been submitted to this office since September 1994 for the second quarter of 1994. Please be aware that failure to collect groundwater monitoring data undermines efforts to accurately delineate the direction and extent of contaminant migration at your site.

Per California Code of Regulations, Title 23, Division 3, Chapter 16, Article 5, and guidelines established by the California Regional Water Quality Control Board (RWQCB), ground water samples are to be collected and analyzed quarterly, including water level measurements and elevation contours. A report of each quarterly monitoring event is due to this office the first day of the second month of each subsequent quarter until this site qualifies for final RWQCB "sign-off".

Please begin quarterly monitoring at the site within 15 days and submit the first report to this office by September 7, 1995.



Varni

Re: 16525 Worthley Dr.

August 7, 1995

Page 2 of 3

2. As indicated in previous correspondence and per my conversation with Mr. Foster on August 1st, you are planning to request that this site be considered a Non-Attainment Area (NAA). Before a site can apply for NAA, the extent of petroleum contamination in groundwater must be adequately delineated in all directions. In regard to this site, the plume boundaries have not been adequately defined in the downgradient directions from southwest to southeast. Permanent groundwater monitoring wells will need to be placed at perimeter locations southwest to southeast of monitoring well RW-1 to establish the limits of groundwater contamination.

Based on 1994 groundwater monitoring data for monitoring well MW-2, MW-2 could serve as a southeast perimeter well as long as benzene levels remain below two (2) parts per billion. More recent groundwater monitoring data will hopefully provide data to assist in determining if this well could be considered as an appropriate perimeter well. Should elevated levels of groundwater contamination be detected at monitoring MW-2, then a groundwater investigation south of MW-2 will be required.

A groundwater investigation is required southwest of monitoring RW-1. This investigation must include the installation of a permanent "perimeter" monitoring well to define the limits of groundwater contamination emanating southwest from this site.

Please submit an addendum to the workplan dated January 6, 1995 that includes analysis of recent groundwater monitoring data for the site and the revised plans for delineating the extent of groundwater contamination downgradient of monitoring well RW-1. **The addendum is due to this office no later than September 7, 1995.**

Mr. Foster indicated that you were interested in knowing when/how you could reduce the sampling frequency for monitoring wells from quarterly to a less frequent schedule at this site. Please be aware that this office approved the suspension of sampling of monitoring wells MW-1, MW-4, MW-5, MW-6, MW-7 in March of 1991 and a reduction of sampling of MW-8 to an annual event beginning in May 1992. Monitoring wells RW-1 and MW-2 must be sampled on a quarterly basis, as specified above, due to the need to monitor for the presence and concentrations of groundwater contamination in these areas.

Varni

Re: 16525 Worthley Dr.

August 7, 1995

Page 3 of 3

For your review, I have attached a copy of the most recent draft copy of the San Francisco Bay Regional Water Quality Control Board's memorandum for Implementing a Ground Water Non-Attainment Area. This policy has not yet been approved by the State; however, it is being implemented on a case-by-case basis in Alameda County. A Groundwater Management Plan must be developed and proposed as part of the NAA request process. After downgradient monitoring wells have been installed to establish the perimeter of the contaminant plume boundaries to the southwest and southeast, a reduction in sampling frequency, if appropriate, could be proposed in the Groundwater Management Plan for this site.

Please contact me at (510)567-6755 if you have questions or comments. We look forward to receiving the next quarterly report and workplan addendum by September 7th.

Sincerely,



Amy Leech  
Hazardous Materials Specialist

**ATTACHMENT**

c: Stason Foster w/attachment  
Lowney Associates  
405 Clyde Ave  
Mountain View CA 94043-2209

Acting Chief of Environmental Protection-File(ALL)

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY

DAVID J. KEARS, Agency Director



RO# 1052

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH  
State Water Resources Control Board  
Division of Clean Water Programs  
UST Local Oversight Program  
80 Swan Way, Rm 200

January 26, 1995

ALAMEDA COUNTY CC4580  
DEPT. OF ENVIRONMENTAL HEALTH  
ENVIRONMENTAL PROTECTION DIVISION  
1131 HARBOR BAY PKWY., #250  
ALAMEDA CA 94502-6577

COSMAS, LTD.  
14 Mirada Road  
Half Moon Bay, CA 94019

STID 3604

Subject: Work plan for investigations at 16525 Worthley Drive,  
San Lorenzo, California

Dear Mr. Varni:

This office has reviewed Lowney Associates' (Lowney) work plan, dated January 6, 1995. This work plan is acceptable to this office provided that the following items are addressed and/or included:

- o One monitoring well located south of MW-2 was proposed in the plan. Historical ground water gradient data of this site has shown that the gradient fluctuates south to southeast and south to southwest. The proposed monitoring well south of MW-2 would assist in delineating the contamination to the southeast but not to the southwest. We recommend you consider installing an additional monitoring well south to southwest of the excavation area to assist in delineating the extent of contamination.
- o Well drilling permits should be secured through the Alameda County Flood Control and Water Conservation District, Zone 7, in Pleasanton. An encroachment permit would be obtained through Alameda County Public Works, 399 Elmhurst St., Hayward 94544. The contact for an encroachment permit is John Rogers (510)670-5429.
- o Screen placement for the monitoring wells should accommodate seasonal fluctuations of the water table. In addition, site specific data has shown that, on average, the water table is at approximately 7 feet bgs. In general, screen placement should range from 10 feet below to 5 feet above the water table.

Varni

Re: 16525 Worthley Dr.

January 26, 1995

page 2 of 3

- o The development of monitoring wells must comply with Title 23, Article 4, Section 2649d8 of the California Code of Regulations:  
  
72 or more hours following well construction, all ground water monitoring wells shall be adequately developed and equilibrium shall be established prior to any water sampling. Additionally, please be reminded to wait a minimum of 24 hours after development of the wells before sampling.
- o Subsequent to the installation of the monitoring wells; the well must be surveyed to an established benchmark, with an accuracy of 0.01 foot. Quarterly ground water monitoring and reporting will be required for RW-1, MW-2, and the new wells and annually for MW-8 until this site qualifies for closure. Ground water elevations and corresponding gradient determinations are to be conducted quarterly as well.
- o Submit a Health & Safety Plan for the proposed work to this office.
- o Per our letter dated September 21, 1994, we still have not received historical information regarding tank removals, initial soil samples of the tank pit and overexcavated soil, and documentation regarding disposal of the tanks and excavated soils. Please respond to this request as this information is vital to site assessment and eventual case closure.

Mr. Foster indicated we could expect a response to these items by next week. If you have questions please call me at (510)567-6755.

Sincerely,



Amy Leech  
Hazardous Materials Specialist

Varni

Re: 16525 Worthley Dr.

January 26, 1995

page 3 of 3

cc: Anthony B. Varni  
22771 Main Street  
PO Box 778  
Hayward CA 94543

Stason Foster  
Lowney Associates  
405 Clyde Avenue  
Mountain View CA 94043

John Rogers QIC 50502  
Alameda County Public Works

Edgar Howell

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R01052

RAFAT A. SHAHID, Assistant Agency Director

September 21, 1994

DEPARTMENT OF ENVIRONMENTAL HEALTH  
Hazardous Materials Division

COSMAS, LTD.  
14 Mirada Road  
Half Moon Bay, CA 94019

1131 HARBOR BAY PKWY., #250  
ALAMEDA CA 94502-6577  
(510)567-6700

STID 3604

6525

Re: Required investigations at ~~16252~~ Worthley Drive, San  
Lorenzo, California

Dear Mr. Varni,

This office has reviewed Lowney Associate's (Lowney) First Quarter 1994 Monitoring Report, containing responses to the County's April 27, 1994 letter. Lowney proposes to direct the site towards the newly established Non-Attainment Zone (NAZ) guidelines, formally known as Alternative Points of Compliance. A fundamental prerequisite for NAZ is that a site fully delineate the extent of its contaminant plume and encompass the plume with monitoring wells to identify any potential migration of this plume. As stated in the amended Regional Water Quality Control Board's (RWQCB) Basin plan, "the Regional Water Board will require dischargers to monitor for containment at points located at the pollution plume boundary, the property boundary, or at other appropriate locations. However, established cleanup levels that meet water quality objectives must be achieved at containment monitoring points." Your site has not yet fully delineated the extent of the ground water contaminant plume, which is also required under Article 11 Title 23 California Code of Regulations, or established the cleanup water quality objectives in the currently most downgradient well.

If you wish to pursue NAZ for your site, you will firstly be required to determine whether the ground water beneath the site recharges, or is hydraulically connected to, the canal. If it is, canal samples may be collected periodically to define the downgradient extent of the contaminant plume. If ground water is not hydraulically connected to the canal, an additional downgradient monitoring well will need to be installed.

Please be aware that NAZ is not a closure guideline, but rather a guideline for managing contaminated ground water. If you select the NAZ option, ground water monitoring must continue at the site. As stipulated in RWQCB's NAZ guidelines, you would be required to submit a plan including the assessment of human health and environmental risks; management measures (e.g., deed notifications/restrictions, indemnification agreements, site operation and maintenance, health and safety plans, utility workers notice, etc.); contingency options; and a commitment to

COSMAS, LTD.  
Re: 16525 Worthley Drive  
September 21, 1994  
Page 2 of 2

mitigating measures.....The plan should recommend monitoring frequency and duration and a timeline for meeting closure criteria."

NAZ also requires that the "Discharger" shall assess both technical and economic feasibility to substantiate the reason for discontinuing remediation efforts at the site.

If the site meets the above requirements, the site will be eligible for NAZ. However, if, at any point during the monitoring, contaminant concentrations are shown to increase significantly, or the contaminant concentrations in the "zero line" or delineating wells are shown to exceed established cleanup levels, then further investigations or remediation may be required.

Lastly, per the County's April 27, 1994 letter, this office requested that you submit the report documenting the installation of RW-1 and all information and reports providing a history of the number and types of tanks removed from the site, the site's past uses, analysis results of all the samples collected from the tank pit, the confirmatory samples collected from the overexcavation of the pit, and documentation of the disposal of the excavated soil. This information has not yet been submitted to this office. Please make a diligent effort to procure this information, as it is essential for the accurate review and assessment of the status of this site.

If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,



Juliet Shin  
Hazardous Materials Specialist

cc: Anthony B. Varni  
22771 Main Street  
P.O. Box 778  
Hayward, CA 94543

Stason Foster  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Edgar Howell

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY

DAVID J. KEARS, Agency Director



R01052

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH  
State Water Resources Control Board  
Division of Clean Water Programs  
UST Local Oversight Program  
80 Swan Way, Rm 200  
Oakland, CA 94621  
(510) 271-4530

April 27, 1994

COSMAS, LTD.  
14 Mirada Road  
Half Moon Bay, CA 94019

STID 3604

Re: Investigations at 16525 Worthley Drive, San Lorenzo,  
California

To Whom It May Concern,

This office has received and reviewed Lowney Associates' (Lowney) work plan, dated April 1, 1994. In the work plan, Lowney proposed to disconnect the ground water extraction system at the site and continue quarterly ground water monitoring from Wells MW-2 and RW-1 for four additional quarters. If the concentrations remain consistent with the concentrations observed during ground water extraction, they wish to propose the site for closure. This proposal is not acceptable for the following reasons:

- o Although Lowney states that the levels of Benzene have frequently been below drinking water standards of 1 part per billion (ppb), this has not been the case for Well RW-1. Contrary to Lowney's proposal, the levels being observed in Well RW-1 cannot be left in place without, at a minimum, a risk assessment.
- o However, if it is shown that there is currently any off-site contamination, or a future threat of off-site contamination, a risk assessment will not be acceptable. Immediately downgradient of the currently sampled wells, MW-2 and RW-1, is a canal. If ground water extraction was halted, the canal may be impacted, due to plume migration. If you were to discontinue ground water extraction and conduct quarterly well monitoring, you would be required to include sampling of the canal as part of the quarterly monitoring events. If a risk assessment can be conducted, you will be required to assure that there will be no future impacts to the canal and any wildlife or humans coming in contact with the canal.
- o Although the contaminant levels observed in Well MW-2 and RW-1, appear to have attenuated recently, there are some concerns over the sometimes erratic behavior of the concentrations. For example, during the November 1992 sampling of Well MW-2, no benzene was detected, but the



COSMAS, LTD.  
Re: 16525 Worthley  
April 27, 1994  
Page 2 of 3

quarter immediately before and after the November 1992 sampling event, fairly elevated levels of benzene were identified at 26 ppb and 17 ppb. Furthermore, during the March 1993 sampling of RW-1, 2,400 ppb TPHg and 330 ppb benzene was identified from RW-1, however, only one month later, no TPHg and 13 ppb benzene was identified from this well. This information indicates that not enough investigations may have been conducted to fully understand or characterize the problem.

- o In addition to the erratic behavior of contaminant concentrations, this office has noted that all the on-site wells, except for Well MW-8, appear to be screening significantly below the water table. Recently, in October 1993, this office obtained a copy of RESNA's August 1987 Soil and Ground Water Investigation Report, giving the screened intervals of the on-site wells, excluding RW-1. Wells 1, 3, and 4 are screened from 15 to 25 feet below ground surface (bgs), and Wells 2 and 5 are screened from 10 feet bgs. However, on average, the water table is located at approximately 7 feet bgs. As is commonly known, both dissolved-phase and separate-phase TPHg tends to float on top or near the top of the water table. Therefore, samples collected from the on-site wells may not be representative of the current ground water condition. In fact, some of the erratic concentrations may be attributable to the inadequate screen intervals.
- o This office is unable to accurately assess the status of the site, due to the fact that we are missing a substantial amount of information on site investigations. This office is requesting that you submit the report documenting the installation of RW-1, which provides details of the well construction (including the screen intervals), and all information and reports providing a history of the number and types of tanks removed from the site, the site's past uses, analysis results of all the samples collected from the tank pit and the confirmatory samples collected from the overexcavation of the pit, the disposal of the excavated soil, etc. This office essentially has no information on the site prior to the August 1987 report documenting some of the well installations.
- o Historically, the implementation of ground water extraction systems at other contaminated sites have shown ground water extraction to be a fairly good containment measure, but not an effective solution for remediation. Residual

COSMAS, LTD.  
Re: 16525 Worthley  
April 27, 1994  
Page 3 of 3

hydrocarbons are known to adhere to the pore spaces in isolated droplets, which is termed "residual saturation". These droplets become trapped in the pore spaces and tend to remain as a source of contamination by dissolving into the water. The occurrence of residual saturation is heightened in fine textured soil, which exists at your site, and although ground water extraction may intermittently remove the already dissolved phase of hydrocarbons in ground water, it does not effectively remove the residual contamination still remaining in the pores. Other methods are usually sought for remediating this residual soil contamination. The time it will take for the residual soil contamination to fully dissolve into the ground water is unpredicable, therefore, it is also unknown how much longer the ground water, and possibly the canal, will continue to be impacted subsequent to the discontinuation of the extraction system.

All the above questions and comments need to be addressed before this office can accurately assess the next required investigative steps at the site.

If you have any questions or comments, please contact me at (510) 271-4530.

Sincerely,



Juliet Shin  
Hazardous Materials Specialist

cc: Anthony B. Varni  
22771 Main Street  
P.O. Box 778  
Hayward, CA 94543

Ron L. Helm  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Edgar Howell-File(JS)

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY

DAVID J. KEARS, Agency Director



R01052

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH  
State Water Resources Control Board  
Division of Clean Water Programs  
UST Local Oversight Program  
80 Swan Way, Rm 200  
Oakland, CA 94621  
(510) 271-4530

March 23, 1994

Mr. Anthony Varni  
22771 Main St.  
Hayward, CA 94543

STID 3604

16525

Re: Investigations at 16526 Worthley Drive, San Lorenzo,  
California

Dear Mr. Varni,

Per my conversation with Richard Garlow, RESNA, on March 23, 1994, it is the understanding of this office that you recently purchased the above property, and that you intend to take over the responsibility of resuming investigations at the site.

Quarterly ground water monitoring and ground water remediation is required to continue at the site. This office recently received the quarterly ground water monitoring report for the fourth quarter of 1993. The next quarterly report is due in April 1994. If you have any questions or comments, please contact me at (510) 271-4530.

Sincerely,

A handwritten signature in cursive script, appearing to read "Juliet Shin".

Juliet Shin  
Hazardous Materials Specialist

cc: Richard Ernest  
Crown Metal Manufacturing Co.  
765 South State Route 83  
Elmhurst, Il 60126-4700

Elise Varon  
765 S. Route 83  
Elmhurst, Illinois 60126

Edgar Howell-File(JS)

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY

DAVID J. KEARS, Agency Director



R01052

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH  
State Water Resources Control Board  
Division of Clean Water Programs  
UST Local Oversight Program  
80 Swan Way, Rm 200  
Oakland, CA 94621  
(510) 271-4530

May 12, 1993

Mr. Richard Earnest  
Crown Metal Manufacturing Company  
at Pacific International Steel  
16525 Worthley Avenue  
San Lorenzo, CA 94580

STID 3604

Re: Investigations at 16525 Worthley Avenue, San Lorenzo,  
California

Dear Mr. Earnest,

This office has received and reviewed RESNA's latest quarterly report, dated April 1993. It appears in this last sampling event, groundwater levels in all the monitoring wells were much shallower than in all the previous quarters of monitoring. This office is concerned that historical shallow water levels may have deposited levels of hydrocarbons in the shallower soils, and that this contamination may be leaching out now with the rising ground water. Laboratory analysis results of the February 24, 1993 quarterly sampling event appears to support this idea, since contaminant concentrations in both MW-2 and RW-1 increased for this quarter in conjunction with the rising water table.

Consequently, this office is requesting that, if the water levels are as shallow for the next quarterly sampling event, the following wells should be sampled: Wells MW-8, MW-2, RW-1, MW-4, and MW-1.

If you have any questions or comments, please contact me at (510) 271-4530.

Sincerely,

Juliet Shin  
Hazardous Materials Specialist

cc: Richard Hiett, RWQCB

Mark Detterman  
RESNA  
3315 Almaden Expressway, Ste 34  
San Jose, CA 95118

Edgar Howell-File(JS)

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY

DAVID J. KEARS, Agency Director



R01052

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH  
State Water Resources Control Board  
Division of Clean Water Programs  
UST Local Oversight Program  
80 Swan Way, Rm 200  
Oakland, CA 94621  
(510) 271-4530

August 27, 1992

Richard Earnest  
Crown Metal Manufacturing Company  
at Pacific International Steel  
16525 Worthley Avenue  
San Lorenzo, CA 94580

STID 3604

RE: Request for information regarding former investigations  
conducted at 16525 Worthley Avenue, San Lorenzo, California

Dear Mr. Earnest,

In a letter dated May 8, 1992, this office requested that you submit the results of pump tests performed at the site, which, according to a RESNA consultant, would show that the current operation of the ground water extraction system is preventing the possible migration of contaminants into the canal. This office would like a copy of the pump test results for review and confirmation of the above conclusion. Additionally, this office required that you submit lab analysis results for a water sample collected from the canal, and a diagram showing where this sample was collected.

To this date, this office has not received any of the above requested information. Please submit the required information within 30 days of the date of this letter.

If you have any questions or comments, please contact me at (510) 271-4530.

Sincerely,

  
Juliet Shin  
Hazardous Materials Specialist

cc: Richard Hiett, RWQCB

Jim Ferdinand, Eden Consolidated Fire Dept.

Jim Rubens  
RESNA  
42501 Albrae Street  
Fremont, CA 94538

Mark Thompson, Alameda County District Attorney's Office  
Edgar Howell-File (JS)

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R01052

RAFAT A. SHAHID, Assistant Agency Director

May 8, 1992

DEPARTMENT OF ENVIRONMENTAL HEALTH  
Hazardous Materials Division  
80 Swan Way, Rm. 200  
Oakland, CA 94621  
(510) 271-4320

Richard Earnest  
Crown Metal Manufacturing Company  
at Pacific International Steel  
16525 Worthley Avenue  
San Lorenzo, CA 94580

STID 3604

RE: Delineation of groundwater contaminant plume at Crown Metal  
Mfg. Company, located at 16525 Worthley Avenue, San Lorenzo,  
California

Dear Mr. Earnest

It is the concern of this Department that groundwater contaminants are migrating off site and possibly into the canal that runs adjacent to the southern boundary of the above site. According to the groundwater sampling results for the last four quarters, it appears that the groundwater contamination plume is concentrated at the southern portion of your property in the area of Monitoring Wells RW-1 and MW-2.

Per Ms. Shin's conversation with Christopher Palmer of Resna, the results of pump tests at the site show that the current operation of the groundwater extraction system at the site is preventing the possible migration of contaminants into the canal. This office would like a copy of the pump test results for review and confirmation of the above conclusion. Additionally, Mr. Palmer stated that a water sample was formerly collected and analyzed from the canal. This office would like a copy of the lab analysis results for this sample and a diagram showing the location of the water sampling.

This office has received your request, dated April 30, 1992, for a reduction in sampling frequency for well MW-8. According to the four previous groundwater monitoring reports, this well has not identified concentrations of Total Petroleum Hydrocarbons as gasoline (TPHg) or benzene, toluene, ethylbenzene, or xylenes (BTEX) above the detection limits. Considering that no TPHg or BTEX has been detected in the groundwater collected from this well, and that a groundwater extraction system is currently in operation in close proximity to this well, this office approves of your request for a reduction in sampling frequency from quarterly to annually for well MW-8.

If you have any questions or comments, please contact Juliet Shin  
at (510) 271-4320.

Sincerely,



Scott O. Seery, CHMM  
Senior Hazardous Materials Specialist

cc: Richard Hiatt, RWQCB

Jim Ferdinand, Eden Consolidated Fire Dept.

Christopher Palmer  
c/o RESNA  
42501 Albrae Street  
Fremont, California 94538

*Fate JB*

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



R01052

DEPARTMENT OF ENVIRONMENTAL HEALTH  
Hazardous Materials Program  
80 Swan Way, Rm. 200  
Oakland, CA 94621  
(415)

March 25, 1991

Richard Earnest  
Crown Metal Manufacturing Company  
at Pacific International Steel  
16525 Worthley Av.  
San Lorenzo CA 94580

RE: Proposed Installation of Additional Groundwater Monitoring Well  
and Change in Monitoring Schedule for Upgradient Wells

Dear Mr. Earnest:

I have reviewed Exceltech's proposal for the installation of one additional downgradient well to define the extent of groundwater contamination at your San Lorenzo site. Exceltech proposes to delete upgradient wells MW-1, 4, 5, 6 and 7 from the quarterly monitoring schedule based on fairly consistent negative findings in these wells up to and including the last quarterly sampling results (February, 1991). With the installation of the new well, and the continued sampling of two existing wells, there would be three sampling points as of May 1991 from which to gather data about the extent of groundwater contamination.

Exceltech's proposal is acceptable to this office, however, should petroleum fuel contamination be detected in the newly installed well, additional groundwater monitoring wells will be required at your site.

You may contact me with any questions at (415)271-4320.

Sincerely,

Pamela J. Evans  
Hazardous Materials Specialist

c: Richard Hiatt, Regional Water Quality Control Board  
Susan Keach, Oro Loma Sanitary District  
Britt Von Thaden, Exceltech



ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R01052

January 17, 1991

Richard Earnest  
Crown Metal Manufacturing Company  
at Pacific International Steel  
✓ 16525 Worthley Av.  
San Lorenzo CA 94580

DEPARTMENT OF ENVIRONMENTAL HEALTH  
Hazardous Materials Program  
80 Swan Way, Rm. 200  
Oakland, CA 94621  
(415)

RE: Groundwater Investigation and Remediation for Petroleum Fuel  
Constituents

Dear Mr. Earnest:

I have reviewed the Quarterly Sampling Reports prepared by Exeltech for the groundwater investigation at your site. Since 1987, you have gathered sampling data for the shallow groundwater underlying your site. The data indicate that any groundwater contamination to the north and east of the former tank pit is decreasing. Wells to the south and west of the former pit are showing contaminant levels much above detectable.

I am aware that you have begun a groundwater remediation program at your site. However, it is clear from examining the analysis data that the full extent of the contaminant plume to the south and west of the former tank pit has not been defined. In order for you to define the contamination and to properly evaluate the effectiveness of your remediation, it will be necessary for you to install additional monitoring wells. These wells must be in the down gradient direction from existing wells (RW-1, MW-2, MW-7) that are currently showing contamination. Based on Exeltech's data, the down gradient direction is variable, ranging from southwest to southeast. Currently, the only wells that can be found in this arc are showing contamination. Therefore, additional wells are needed to define the outer edge of the contamination.

Please submit a workplan for additional well locations by February 28, 1991, and include a timetable for their installation. You may contact me with any questions at 271-4320.

In order to cover agency oversight costs, you must also submit a check to this office for \$500.00. Exeltech's May 4, 1990 correspondence mentioned that a check was enclosed, but we have received no additional funds.

Sincerely,

Pamela J. Evans  
Hazardous Materials Specialist

c: Richard Hiatt, Regional Water Quality Control Board  
Britt Von Thaden, Exeltech

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Director



R01052

Telephone Number: (415)

May 15, 1990

Richard Earnest  
Crown Metal Manufacturing Company at Pacific International Steel  
16525 Worthley Dr.  
San Lorenzo CA 94580

RE: Addenda to Groundwater Remediation Plan for Pacific  
International Steel

Dear Mr. Earnest:

My staff has reviewed the addenda to the work plan prepared by Exceltech for the above referenced facility. The items requested in my April correspondence have been addressed and remediation work may proceed once a discharge permit from either the Sanitary District or the Regional Water Quality Control Board is issued. Before implementing remediation, please take the following steps:

1. Provide this office with confirmation that the discharge permit has been issued.
2. Also supply information regarding the proposed parameters of the remediation, including target levels for cleanup and approximate volume of groundwater expected to be treated.
3. Notify this office at least 48 hours in advance of installing remediation equipment.

Please contact Pamela Evans, Hazardous Materials Specialist, at 271-4320 with any questions you may have.

Sincerely,

Edgar B. Howell III, Chief  
Hazardous Materials Division

EBH:PJE

c: Lester Feldman, Regional Water Quality Control Board  
Gil Jensen, Alameda County District Attorney  
Alonzo Granados, Exceltech

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



R01052

DEPARTMENT OF ENVIRONMENTAL HEALTH  
Hazardous Materials Program  
80 Swan Way, Rm. 200  
Oakland, CA 94621  
(415)

April 10, 1990

Richard Earnest  
Crown Metal Manufacturing Company at Pacific International Steel  
16525 Worthley Dr.  
San Lorenzo CA 94580

RE: Groundwater Remediation at Pacific International Steel

Dear Mr. Earnest:

My staff has reviewed the work plan prepared by Exceltech for ground water remediation at the above referenced facility. Before any further cleanup work can take place at the site, the following issues must be addressed. The required information may be submitted as addenda to the work plan.

1. In order to cover our costs for overseeing this remediation, a deposit of \$500.00 must be submitted, payable to County of Alameda.
2. Please supply the following information concerning tank removal activities:
  - a. Date of tank removals
  - b. Number of tanks removed and their sizes
  - c. All materials stored in the tanks
  - e. Sampling activities connected with the tank removal and sampling results
  - f. We will also need copies of hazardous waste manifests for each tank
3. A report of the underground tank leak should have been submitted to this office once the leak was discovered. Our files contain no release report for this property. Enclosed is a report form that you may use to supply information about the release.
4. Supply a complete description of storage, disposal and backfilling activities connected with all contaminated soil.
5. Include a characterization of the subsurface soils and the aquifer, as well as a discussion of the potential short and long term impacts of the groundwater contamination found at the site in your additions to the plan.

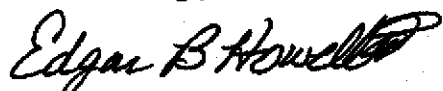
April 9, 1990  
Richard Earnest  
Crown Metal Manufacturing Company  
Page 2 of 2

6. Submit a site safety plan as part of the proposal.
7. A permit for the proposed treatment system may be needed from California Department of Health Services, Alternative Technology Division. This matter should be investigated before work proceeds.
8. Please describe the intended manner of disposal for contaminated material in the spent carbon beds.

Once a permit is issued by either Oro Loma Sanitary District or The Regional Water Quality Control Board, provide this office with confirmation that a discharge permit has been issued. Also supply information regarding the proposed parameters of the remediation, including target levels for cleanup, approximate volume of groundwater expected to be treated and duration of the remediation operation.

Please contact Pamela Evans, Hazardous Materials Specialist, at 271-4320 with any questions you may have.

Sincerely,



Edgar B. Howell III, Chief  
Hazardous Materials Division

EBH:PJE

c: Lester Feldman, Regional Water Quality Control Board  
Gil Jensen, Alameda County District Attorney  
Alonzo Granados, Exceltech