

R02807

RAFAT A. SHAHID, Assistant Agency Director

December, 18 1991

Mr. Dennis Hunt District Manager Industrial Asphalt 52 El Charro Road Pleasanton, CA 94566 DEPARTMENT OF ENVIRONMENTAL HEALTH Hazardous Materials Division 80 Swan Way, Rm. 200 Oakland, CA 94621 (510) 271-4320

RE: FEASIBILITY STUDY REPORT (FSR)
INDUSTRIAL ASPHALT, 52 EL CHARRO ROAD, PLEASANTON, CALIFORNIA

Dear Mr. Hunt:

This letter is to confirm the agreements we reached during the 9/19/91 meeting held in this office. This office and the RWQCB concurs "in principle" with the recommendations presented in the FSR. However, as remediation progresses further revisions to the FSR may be required by any of the regulatory agencies involved.

Since the FSR recommends "no action" for soil remediation, this office will certainly want to see an aggressive groundwater remediation program designed and implemented without any further delay. A groundwater remediation program including a detailed time table of all proposed activities must be submitted to this office and the RWQCB as soon as possible.

The issue of leachability of both the petroleum hydrocarbons and PCBs from soil to groundwater in the long run is an important concern to this office. Therefore, during the course of groundwater remediation and depending on its' effectiveness in removing the contaminants a through study should be carried out to evaluate and the potential threat to groundwater resources at this site. Should you have any questions concerning this matter, please contact me at 510/271-4320.

Sincerely,

Ravi Arulanantham

Hazardous Materials Specialist

c; Lester Feldman, RWQCB
Mark Thomson, Deputy District Attorney
David Behrens, Kleinfelder
Files

## ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY DAVID J. KEARS, Agency Director

February 21, 1991

Mr. Dennis Hunt Industrial Asphalt 52 El Charro Rd. Pleasanton, CA 94566 DEPARTMENT OF ENVIRONMENTAL HEALTH Hazardous Materials Program 80 Swan Way, Rm. 200 Oakland, CA 94621 (415)

Dear Mr. Hunt:

Thank you for submitting the Remedial Investigation Report/Baseline Health Risk Assessment document prepared for the site by Kleinfelder, Inc. We have reviewed this document and its conclusions in consultation with the Regional Water Quality Control Board in Oakland, and the following is our formal response.

The document concludes that from a health risk standpoint, no further remedial action is warranted; this is based on the nearest downgradient water supply well being the Jamieson well, about 900 feet northeast of the former underground tank area. However, water directly beneath the Industrial Asphalt site is considered "waters of the state" within an aquifer used for water supply, and as such must be restored to drinking water standards. In addition, the Water Board requires the use of recorded worst-case groundwater degradation data as a basis for plume and concentration modeling, rather than existing contaminant levels. As you may recall, up to 14 feet of free product was recorded in one monitoring well in 1987.

Therefore, we are requiring that Industrial Asphalt prepare a plan for groundwater cleanup to below MCLs and below levels that could result in a  $1 * 10^{-6}$  cancer risk. This will also require a plan for soil remediation at depth. Groundwater monitoring needs to continue as planned, with all wells tested also for BTEX, PCB, oil & grease (method 5520 C & F), and chlorinated hydrocarbons.

I have discussed these general requirements with Krys Jesionek at Kleinfelder. If you have any questions about this letter, please contact the undersigned at 271-4320.

Sincerely,

Gil Wistar

Hazardous Materials Specialist

cc: Krys Jesionek, Kleinfelder, Inc. (2121 North California Blvd., Walnut Creek, CA 94596) Lester Feldman, RWQCB Rafat A. Shahid, Asst. Agency Director, Environmental Health files

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## 'ALAMEDA COUNTY HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director

November 13, 1989

Mr. Dennis Hunt Industrial Asphalt 52 El Charro Rd. Pleasanton, CA 94566 DEPARTMENT OF ENVIRONMENTAL HEALTH Hazardous Materials Program 80 Swan Way, Rm. 200 Oakland, CA 94621 (415)

RE: Review of work completed and additional work required regarding contamination at the Industrial Asphalt facility

Dear Mr. Hunt:

The Alameda County Department of Environmental Health, Hazardous Materials Division, has reviewed the Industrial Asphalt file and consulted with the San Francisco Bay Regional Water Quality Control Board (RWQCB), in order to develop guidelines for further characterization and remediation at this site. As you know, the contamination discovered in early 1987 has been the subject of ongoing studies right up to the present. In our view, the time has come for Industrial Asphalt, as the responsible party, to pull all the pieces together, fill in data gaps, and develop a comprehensive remediation plan. The purpose of this letter, then, is to: 1) outline what this office knows about the site; 2) review theories that have been advanced to explain analytical results; and 3) define what further work is required at the site.

Before tank closure began, there were eight underground tanks at the site; six of these tanks have been removed (two containing diesel and four containing asphalt), and two asphalt tanks remain in the ground. Following the initial removals, seven soil borings were drilled to a depth of about 45 feet in the tank area. Soil sample results indicated diesel at up to 4,600 ppm. No other subsurface soil samples have been collected to date, except the ones collected during the installation of monitoring wells MW-9, MW-10, and MW-11. At these locations, samples were collected from 70, 75, and between 65-75 feet, respectively, and contamination ranged from ND to 120 ppm hydrocarbons.

There are 10 monitoring wells and one observation well at the facility, which were installed over three different time periods beginning in 1987. Monthly monitoring and water level readings have occurred up to the present. In MW-1, free-product thickness has ranged up to 3.2 feet (August 1987). In MW-2, 14 feet of free product was measured in August 1987, and there was still 5 feet of product in July 1988. MW-3 had 2.6 feet of product in March 1988, and 0.5 feet as of August 1988. These three wells, the first to be installed, are also the closest monitoring wells to the former tanks, and are relatively shallow. No free product has been found in wells MW-4, MW-5, MW-6, MW-7, MW-9, MW-10, or MW-11, although sheens have been recorded in wells MW-6, MW-7, MW-9, and MW-11.

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Monitoring well MW-8 had a free product level of 2.4 feet in July 1988, and this decreased to 0.13 feet in December 1988. Overall, the level of free product has appeared to decline, as has the level of water in all wells, since the monitoring program began. Wells MW-1, MW-2, and MW-3 have been dry more often than not over the past nine months or so.

Kleinfelder, Inc. has advanced several theories regarding the disposition of contaminants in the subsurface environment. first place, they hypothesized that the very high levels of free product found in the initial year of monitoring resulted from the drilled boreholes acting as a conduit through which product could accumulate rapidly. By this theory, the total released volume of diesel or other contaminants would be much smaller than a free product thickness of 14 feet might indicate. Another theory is that contaminants have migrated relatively quickly through the porous soil profile and flattened out onto the water table, to the extent that little, if any, pockets of pure product remain. Finally, Kleinfelder has suggested that the contaminants are viscous enough to have hung up in the soil as the level of groundwater has dropped steadily. At this point, none of these theories has been proved, and the extent and location of the soil/groundwater plume remains sketchily defined, at best.

On the first page of its September 4, 1987 report, Kleinfelder states the following: "The contaminants of concern at this site have migrated to the ground water table and have contaminated groundwater. The lateral and vertical extent of the contaminant plume, which are as yet unknown, should be delineated in order to assess the impact on soil and groundwater resources. Remediation measures to clean up the contaminated soil and groundwater will be dependent on factors such as 1) concentration level of soil contamination, 2) concentration level of contamination of the groundwater, 3) spatial extent of the contaminant plume, and 4) beneficial uses of the groundwater." We, in consultation with the RWQCB, agree with this prescription, but two years later much of it remains undone.

Therefore, acting as the agent of the RWQCB, we are requiring the following work to be completed.

## A. Further Plume and Hydrologic Characterization

1. What is (are) the contaminant(s) of concern at the site? Is it diesel, asphalt, a mixture, or other hydrocarbons? Define which contaminants are where in the subsurface environment so that a sensible remediation plan can be developed.

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- 2. Soil between a depth of about 45 feet and the water table needs much better characterization in the area of the "inferred plume" (shown on Plate 26 of the September 10, 1989 report). We need far more information on the soil plume (if one exists) so that the "hang-up" theory can be tested.
- 3. Groundwater immediately beneath the area of the former tanks needs better characterization. Wells MW-1, MW-2, and MW-3 are too shallow to provide consistent information, given the fluctuating water table levels, and deeper wells are needed in this area.
- 4. What are beneficial uses of groundwater in the area? What effect could spreading contamination have on drinking water, industrial water supplies, or recreational uses of water? Is there a deeper, confined aquifer in the area that could be affected?

## B. Remediation Plans

- 1. Hydrocarbon and PCB levels in soils must be reduced to a point that they will not further degrade groundwater quality in any way.
- 2. Hydrocarbon and PCB levels in groundwater must be reduced to "ND." An effectiveness evaluation of all components of the remediation operation will need to be performed. The purpose of the evaluation will be to show that the system is doing what it was intended to do; the evaluation at a minimum should indicate whether 1) the capture zone is in fact adequate to contain the plume; and 2) any free product levels, as well as dissolved hydrocarbons and PCBs, are declining in groundwater beneath the site.
- 3. Monthly groundwater sampling and water level monitoring should continue uninterrupted until remediation is complete; quarterly progress reports summarizing this groundwater data, as well as remedial operations to date, will need to be submitted to this office and to the RWQCB.

We are requesting that you address all of the issues raised in this letter and prepare a full report, which includes additional soil and groundwater characterization and specific remedial plans. This report must be submitted to this office and to the RWQCB (attn: Lester Feldman) no later than January 31, 1990.

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The RWQCB is currently unable to manage the large number of fuel leak/remediation cases within Alameda County, and has therefore delegated this responsibility to our office. Because we are overseeing this site under the designated authority of the Water Board, this letter constitutes a formal request for technical reports, according to Sec. 13267(b) of the California Water Code. Failure to respond fully or in a timely manner to this request could result in civil liabilities under the Water Code of up to \$1,000 per day. Other violations of California law may also be cited.

If you have any questions about this letter, please contact the undersigned at 271-4320.

Sincerely,

Gil Wistar

Hazardous Materials Specialist

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cc: Krys Jesionek, Kleinfelder, Inc.

Lester Feldman, RWQCB

Rafat A. Shahid, Asst. Agency Director, Environmental Health

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