KLEINFELDER

March 29, 1993
File: 10-1862-08

Mr. Lester Feldman
Toxics Cleanup Section Leader
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

SUBJECT: Comments on (Revised) Tentative Order and Self Monitoring Program for Industrial Asphalt and Calmat, Pleasanton, Alameda County

Dear Mr. Fellowman:

Kleinfelder has reviewed the above referenced tentative order and self monitoring plan, dated March 9, 1993, for the Industrial Asphalt treatment system. During our review, we have arrived at several comments that we would like to be addressed in the final order, as described in the following paragraphs.

Summary of Modifications, Page 1, Item 5

The second sentence of this paragraph should read "...limitations specified in this order, E-2 samples *(between the second and third carbon units) will be taken, and results will be used to assess compliance with the tentative order. If analytical results of samples from E-2 exceed effluent limitations specified in this order, E-3 samples* (after full treatment of the extracted ground water)..." (additions in italics).

Summary of Modifications, Page 1, Item 6

The sentence should be changed to read "Sampling frequencies for sampling stations I-1, E-1, *E-2*, and E-*3* has been increased..." (changes in italics)

Revised Tentative Order, Page 4, Effluent Limits, Item 3

The statement should be changed to read "The pH of the discharges shall be within the range of 6.0 to 8.5 units if the discharge does not receive a minimum dilution of 10:1, otherwise within the range of 6.0 to 9.0 units."

Revised Tentative Order, Page 4, Table 1, Polynuclear Aromatic Hydrocarbons

EPA Method 8310 (Polynuclear Aromatic Hydrocarbons) has detection limits for some compounds (e.g., acenapthylene, phenenthrene, anthracite) which are greater than effluent limits. We are unclear as to how to assess whether discharge limits are being met when laboratories are unable to detect such low concentrations.

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Self Monitoring Program, Page 2, Top of Page

Change the description of sampling station E-2 to read "At a point in the treatment system after the second carbon unit, but before the third carbon unit," and add station E-3, with the description "At a point after full treatment but before it is discharged to Pond R-4."

Self Monitoring Program, Page 2, Table 1

The heading above the second table column should read "I-1, and E-1, or E-2, or E-3 (1)." The reasoning behind this change is given in our first comment, above.

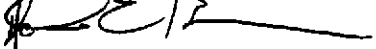
We feel that the frequency of sampling at Station C-2 is more often than necessary. The frequency for sampling and analysis for VOCs, TPH, total oil and grease, PCBs, and pH should be changed from M (monthly) to I/Y & V (initially upon commencement of discharge to Pond R4, then yearly, and within 24 hours whenever the effluent [E-3] is in violation).

Footnote (1) should be changed to reflect the changes described in our first comment; i.e., "*If analytical results from E-1 exceed effluent limitations listed in this order, E-2 samples (between the second and third carbon units) will be taken and analyzed immediately. Results of E-2 sampling are to be known within 96 hours and will be used to assess compliance with the tentative order. If analytical results of samples from E-2 exceed effluent limitations specified in this order, E-3 samples (after full treatment of the extracted ground water) will be taken and analyzed immediately. Results of E-3 sampling are to be known within 96 hours and will be used to assess compliance with the tentative order.*"

If you have any questions on the comments provided, please call Mr. Dennis Hunt or the undersigned.

Sincerely,

KLEINFELDER, INC



John E. Romie, R.G.
Project Manager

JER:blm

cc: Mr. Dennis Hunt (Industrial Asphalt)
Mr. Dwight Beavers (Industrial Asphalt)
Mr. John Jang (RWQCB)
Mr. Ravi Arulantham (Alameda County Department of Environmental Health)
Mr. Jerry Killingstad (Alameda County Flood Control)

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STATE OF CALIFORNIA

PETE WILSON, Governor

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
2101 WEBSTER STREET, SUITE 500
OAKLAND, CA 94612

Phone: (510) 286-1255
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Date: March 9, 1993

SLIC File

Mr. Dennis Hunt
District Manager
Industrial Asphalt
P. O. Box 636
Pleasanton, CA 94566

NOTICE
OF

TENTATIVE ORDER

FOR

NDUSTRIAL ASPHALT AND CALMAT

PLEASANTON

ALAMEDA COUNTY

Comments or recommendations you may have concerning the Revised Tentative Order should be submitted in writing to this Regional Board by March 29, 1993. Comments received after this date cannot be given full consideration.

Sincerely,

LESTER FELDMAN
Toxics Cleanup Section Leader

Enclosures

cc w/ enclosures: Mailing List

REVISED TENTATIVE ORDER (TO) AND TENTATIVE SELF-MONITORING PROGRAM (TSMP) FOR INDUSTRIAL ASPHALT (IA) AND CALMAT (CM)

Regional Board staff mailed the TO, TSMP, and Statement of Basis to interested parties in late December 1992 regarding the proposed discharge/recharge of treated groundwater (GW) from the IA facility located at 52 El Charro Road in the City of Pleasanton. IA has provided comments which necessitated modifications to the TO and TSMP. The following is a summary of the major modifications:

1. IA is a division of CM. On December 8, 1992, CM purchased the majority of assets of Pleasanton Gravel Company/Jamieson Company. The TO and TSMP has been modified to reflect this change of ownership. CM has replaced Jamieson Company as the land owner of the site where treated GW will be discharged to.

2. The treatment system will include 3 granular activated carbon vessels in series instead of four granular activated carbon vessels (in a series of three with one on standby).

3. CM does not have proprietor rights to discharge water into Ponds R11 and R14 as part of its purchase of Jamieson Company. CM, however, does have rights to discharge into Pond R4. CM now proposes to discharge treated GW to Pond R4 instead of Ponds R11 and R14. The major differences between Pond R4 and Ponds R11 and R14 are: (a) Pond R4 is much larger (capacity of 200 million gallons instead of 32.6 and 57.0 million gallons); (b) Pond R4 is much less permeable, and (c) excess water in Pond R4 will be discharged to Arroyo Mocho, a tributary of Alameda Creek. Discharge to Arroyo Mocho (AM) is regulated by an existing NPDES permit (Permit No. CA0027821). Discharge to AM is not expected to adversely impact beneficial uses because IA's treatment system should remove most and possibly all pollutants of concern and because IA's discharge to Pond R4 will be diluted by large amount of water.

4. Due to possible discharge to AM: (a) finding number 8 has been modified to include beneficial uses of Alameda Creek and Alameda Creek Quarry Ponds, (b) effluent limitation A.2. has been modified to cover discharges to AM and (c) Provision C.7. will require contingency plans in case the discharge to AM does not meet effluent limitation A.2.

5. The TSMP has been modified to require sampling between the 1st and 2nd carbon units (sampling point E-1). If analytical results of samples from E-1 exceeds effluent limitations specified in this Order, E-2 samples (after full treatment of the extracted GW) will be taken and results will be used to determine compliance with the revised TO.

6. Sampling frequencies for sampling stations I-1, E-1, and E-2 has been increased to weekly for six weeks following initial startup.

7. Sampling station C-2 (at a point just prior to discharge to AM) has been added to determine if discharge of constituents of concern is occurring to AM.

Review Procedures

Beneficial uses of the underlying groundwaters and of Alameda Creek are described in the attached Tentative Order. On the basis of preliminary staff review and application of lawful standards and regulations, the Regional Board proposes to adopt waste discharge requirements for the discharger.

The proposed permit requirements, rationale, and other supporting information are on file at 2101 Webster Street, Suite 500, Oakland, CA 94612. They may be inspected between 10:00 a.m. and 4:00 p.m. on Tuesday, Wednesday, and Thursday. For further information please contact John Jang at (510) 286-0554.

The Board intends to hold a public hearing and consider adopting the Tentative Order during a public meeting on April 21, 1993 beginning at 9:30 a.m. The meeting will be held in the second floor Meeting Room of the BART Headquarters Building, 800 Madison Street, Oakland, California. Persons wishing to submit written comments or make oral comments at the hearing are requested to submit a written copy of their comments to Mr. John Jang of the Regional Board by March 29, 1993 (2101 Webster Street, Suite 500, Oakland, California 94612).

Attachments: Revised Tentative Order and Tentative Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
2101 WEBSTER STREET, SUITE 500
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STATEMENT OF BASIS

WASTE DISCHARGE REQUIREMENTS FOR INDUSTRIAL ASPHALT AND JAMIESON COMPANY FOR THE PROPERTY LOCATED AT 52 EL CHARRO ROAD, PLEASANTON, ALAMEDA COUNTY

I. Description of Proposed Discharge

Industrial Asphalt and Jamieson Company, by application dated August 12, 1992 and September 28, 1992, have applied for issuance of waste discharge requirements for reinfiltration of treated extracted groundwater. An estimated flow of between 31,000 and 51,000 gallons per day (gpd) of treated groundwater will be recharged to the upper groundwater bearing zone via one or two recharge ponds (Ponds R-11 and/or R-14). The attached Tentative Order is intended to regulate recharge of the treated groundwater.

Industrial Asphalt (IA) currently operates an asphalt manufacturing plant on part of a 177 acre parcel leased from the Jamieson Company (JC). JC harvests and processes sand and gravel at an adjacent site. Ponds R11 and R14 are located on this adjacent site.

Activities at the IA site have polluted the soil and the groundwater. Subsurface investigations have been conducted by IA since 1987. Groundwater samples have detected total petroleum hydrocarbons as diesel (TPH-d) concentrations as high as 1100 ppm, TPH as waste oil as high as 330 ppm, oil and grease concentrations as high as 360 ppm, and polychlorinated biphenyls (PCBs) concentrations as high as 62 ppb (parts per billion). The extent of groundwater and soil contamination beneath the site has been described and illustrated in the following Kleinfelder Inc. reports: "Remedial Investigation (RI) Report for Industrial Asphalt, Pleasanton, California," dated December 28, 1990 and "Feasibility Study for Soil and Ground Water Remediation, Industrial Asphalt, Inc., 52 El Charro Road, Pleasanton, California," dated August 14, 1991.

IA has proposed installing a groundwater extraction, treatment and reinfiltration system to control migration of polluted groundwater. The proposed treatment system consists of (a) eleven extraction wells to pump groundwater, (b) an oil/water separator to reduce the TPH concentrations to below 10 ppm, (c) filters to remove sediments, (d) a UV-lamp sterilizer to reduce biological fouling, (e) four granular activated carbon vessels (in a series of three), and (f) piping to transport the treated groundwater for discharge to Pond R11.

Pond R11 is used by JC for percolation of groundwater extracted from active quarry pits and is located about 1400 feet east of the IA facility. As the water level in R11 rises, water can be pumped from Pond R11 to Pond R14. Both

pond bottoms intersects a coarse gravel layer which facilitates percolation. R11 is about 20 feet deep and has a surface area of about five acres. R14 is about 15 to 20 feet deep and has a surface area of about 10 acres. The estimated capacity of R11 and R14 is about 32.6 million gallons and 57.0 million gallons.

II. Basis for Tentative Waste Discharge Requirements' Effluent Limitations

The proposed effluent limitations in the Tentative Order are based on the San Francisco Bay Basin's Water Quality Control Plan (Basin Plan), State and U. S. Environmental Protection Agency (EPA) plans and policies, best professional engineering and geologic judgement, and best available technolgy economically achievable (BATEA) and are intended to protect the existing and potential beneficial uses of the underlying groundwaters. For a discharge to a recharge area, the Board usually specifies effluent limitations based on Maximum Contaminant Levels (MCLs) or BATEA, whichever is lower. If BATEA can achieve effluent quality close to zero, effluent limits will usually be set at or near the method detection limit (MDL). In addition, the proposed monitoring program requires analyses for additional constituents to screen for unexpected chemicals. Specific rationale for the proposed effluent limitations are summarized below:

Constituents	Effluent Limits (ug/l)
Carbon Tetrachloride	0.5 (SMCL)
1,2-Dichloroethane	0.5 (SMCL)
Vinyl Chloride	0.5 (SMCL)
Benzene	1.0 (SMCL)
Total Volatile Organic Compounds	5.0 (BATEA/DL)
Total Petroleum Hydrocarbons as diesel (as identified by modified EPA Method 8015)/	50.0 (BATEA/DL)
Total Petroleum Hydrocarbons as waste oil	100 (BATEA/DL)
Total Oil and Grease	500 (BATEA/DL)
Polynuclear Aromatic Hydrocarbons (PAHs, per constituent)	0.1/0.2 (BATEA/DL) (1)
Total Polychlorinated Biphenyls (PCBs)	0.5 (MCL/BATEA/DL) (2)

LEGEND: SMCL - State Maximum Contaminant Level
BATEA - Best Available Technology Economically Achievable
DL - Detection Limit

(1) There are sixteen different PAHs, each with a different method detection limit. The primary MCL is 0.1 ppb for benzo(a)anthracene, 0.2 ppb for four other PAHs, 0.3 ppb for one other PAH, and 0.4 ppb for another PAH. In order to protect the beneficial uses of the underlying groundwaters, the proposed effluent limitation for benzo(a)anthracene is 0.1 ppb and the proposed effluent limitation for the other PAHs are 0.2 ppb.

(2) PCBs encompass a class of chlorinated compounds that includes up to 209 variations or congeners with different physical and chemical characteristics. PCBs were commonly used as mixtures called Aroclors. The most common Aroclors are Aroclor-1254, Aroclor-1260, and Aroclor-1242. The effluent limitation in the proposed Tentative Order for Total PCBs is 0.5 ppb because the MCL for total PCBs is 0.5 ppb and laboratory detection limits can achieve 0.5 ppb for total PCBs. The MDL for Aroclor-1242 is 0.065 ppb using EPA Method 608 (the MDLs for the other Aroclors using EPA Method 608 were not determined).

III. Prohibitions

The Tentative Order contains the following prohibitions:

1. The treatment, storage and discharge of treated waste groundwater shall not create a nuisance as defined in Section 13050(m) of the California Water Code, nor degrade the quality of any useable groundwater.

2. There shall be no bypass or overflow of untreated, partially treated or inadequately treated polluted groundwater to waters of the State from the dischargers' wastewater collection, treatment or distribution facilities.

3. No waste groundwater shall be allowed to escape from the designated disposal area(s) as either surface flow or as airborne spray nor be disposed of to an area other than that stipulated in this Order, except as pursuant to an approved contingency plan.

4. The discharge of waste other than treated groundwater, derived onsite from the extraction system or groundwater sampling purge water, as defined in this Order, is prohibited.

5. For treated waste groundwater discharged to Ponds R11 and/or R14:

   a. A minimum of three feet of freeboard shall be maintained in the ponds at all times to prevent the threat of overflow.

   b. The ponds shall be adequately protected from erosion and washout which may result from a rainfall event having a predicted frequency of once in 100 years.

The Basin Plan prohibits discharge of "all conservative toxic and deleterious substances, above those levels which can be achieved by a program acceptable to the Board, to waters of the Basin". The discharger's proposed groundwater extraction, treatment and infiltration system and associated operation, maintenance, and monitoring plans constitute an acceptable control program for minimizing the discharge of toxicants to waters of the State.

IV. Review Procedures

Beneficial uses the underlying groundwaters are described in the attached Tentative Order. On the basis of preliminary staff review and application of lawful standards and regulations, the Regional Board proposes to adopt waste

discharge requirements for the discharger.

The proposed permit requirements, rationale, and other supporting information are on file at 2101 Webster Street, Suite 500, Oakland, CA 94612. They may be inspected between 10:00 a.m. and 3:00 p.m. on Tuesday, Wednesday, and Thursday. For further information please contact John Jang at (510) 286-0554.

The Board intends to hold a public hearing and consider adopting the Tentative Order during a public meeting on February 17, 1993 beginning at 9:30 a.m. The meeting will be held in the second floor Meeting Room of the BART Headquarters Building, 800 Madison Street, Oakland, California. Persons wishing to submit written comments or make oral comments at the hearing are requested to submit a written copy of their comments to Mr. John Jang of the Regional Board by January 21, 1993 (2101 Webster Street, Suite 500, Oakland, California 94612).

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