ALAMEDA COUNTY HEALTH CARE SERVICES

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AGENCY
ency Director

DAVID J. KEARS, Agency Director

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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 5, 1993 StID # 545

Mr. Rich Hiett Regional Water Quality Control Board 2101 Webster St., Suite 400 Oakland CA 94612

Re: Recommendation for Case Closure for Federal Express, 8455 Pardee Drive, Oakland CA 94621

Dear Rich:

Recall during our April 2, 1993 meeting, we discussed the above referenced site and it's eligibility for case sign-off. After considering your concerns and review of the January 1992 and February 1993 reports from IT Corp., it is our office's opinion, with the provision that the information provided to our office was accurate and representative of existing conditions, no further work should be required at this time. This case is referred to your office for either recommendation for closure or for the Board's request for additional investigation. This office also requests notification of final site status. It is also understood should additional information be presented which indicate groundwater impact, further investigation will be required.

Two underground tanks and one hydraulic lift was removed from this site. In summary, a 8,000 gallon gasoline underground storage tank was removed from the east side of the site in September of 1989. Because groundwater was encountered in the pit, sidewall samples were taken at the soil/groundwater interface on the east and west walls. These samples were nondetectable for TPHq and BTEX. A soil sample from the west end under the piping at a depth of 2.0 feet, however, exhibited 1500 ppm TPHg and 3,11,4 and 220 ppm BTEX respectively. Overexcavation in the affected area and soil sampling at 11.0 feet yielded non-detectable TPHg and BTEX. A grab water sample collected at 8 feet from the pit contained elevated levels of TPHg and BTEX. Monitoring wells MW-3 and MW-5 were installed in January and July 1990 on the northwest and southeast sides of the former tank pit within 25 feet. After four and six consecutive quarters of ND for TPHg and BTEX at MW-3 and MW-5 respectively, our office approved the discontinuation of sampling and analysis of these wells in January of 1992.

Mr. Rich Hiett StID # 545 8455 Pardee Drive April 5, 1993 Page 2.

On March 20, 1990 a 300 gallon waste oil tank was removed from the northwest corner of this site. Because groundwater was encountered, a sidewall soil sample was taken. It contained nondetectable concentrations of: TPH as motor oil, oil and grease, gasoline, diesel, chlorinated solvents, semi-volatiles, benzene and ethylbenzene and barely detectable concentrations of toluene and xylene. A grab water sample, however, contained elevated levels of waste oil, oil and grease, gasoline and detectable concentrations of selective chlorinated solvents, toluene, ethylbenzene and xylenes. Monitoring well MW-6 was installed in July 1990 in the assumed downgradient location relative to the former waste oil tank, south-southwesterly. For five consecutive quarters non-detectable concentrations of gasoline, diesel, motor oil, oil and grease and BTEX were found in this well. Due to the initial presence of chlorinated solvents in the grab water sample, Federal Express was requested to continue sampling of monitoring wells 1 and 6 for chlorinated solvents and oil and grease for a minimum of four consecutive quarters. This was completed on February 1993, as both wells concluded four consecutive quarters of non-detectable concentrations for chlorinated solvents.

A 50 gallon hydraulic lift was removed on March 20, 1990 from within the northwest corner of the warehouse. Due to the observance of product staining, overexcavation was performed. Two areas of remained with elevated levels of TPHmo and oil and One area was overexcavated and an extraction well was installed adjacent to the contaminated soil sample. extraction and sampling events were performed from this well. The results of water samplings indicate that the groundwater had not been impacted by the contamination left in place. area of residual TPHmo and oil and grease is near the northwest Monitoring wells MW-6 and MW-1 are in corner of the warehouse. the assumed downgradient relative to this residual contamination. As mentioned previously, these two wells have shown nearly three years of non-detectable concentrations of TPHmo and oil and grease.

It appears that the residual contamination found at this site is oil and grease which may have come solely from the hydraulic lift tank. Upon review, the hydraulic lift was of 50 gallon capacity and therefore would not be considered by definition as an underground tank.

Mr. Rich Hiett StID #545 8455 Pardee Drive April 5, 1993 Page 3.

The gradient at this site has varied over the past years but it is a fact that over nine sampling events from January 1990 to May 1992 six of the calculated gradients were in the south-southwesterly direction. Therefore, monitoring wells MW-1 and MW-6 are appropriately downgradient to the former waste oil and hydraulic tanks.

Please refer to the January 1992 and February 1993 reports from IT Corp., or you may contact Ms. Sydney Geels at 510-372-9100 or me at 510-271-4530 if you have any questions.

Sincerely,

Barney M. Chan

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Hazardous Materials Specialist

- cc: A. Johnson, Federal Express Corp., 8950 Cal Center Drive, Sacramento, CA 95826
 - W. Harris, Koll Co., 5976 West Las Positas Blvd., Suite 208 Pleasanton, CA 94588
 - S. Geels, IT Corporation, 4585 Pacheco Blvd., Martinez, CA 94553
 - E. Howell, files

SO-8455



RAFAT A. SHAHID, Assistant Agency Director

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

May 12, 1992 STID #545

Federal Express Corporation Attn: Mr. Alan Johnson 8950 Cal Center Drive, Suite 370 Sacramento CA 95826

Re: Requirements for Recommendation for Site Closure at Federal Express Facility, 8455 Pardee Drive, Oakland CA 94621

Dear Mr. Johnson:

Our division has received and reviewed the Site Closure Report for the above referenced site as prepared by International Technology Corporation. This report is requesting recommendation for site closure. After consultation with your consultant, Sydney Mills of IT and Mr. Richard Hiett of the Regional Water Quality Control Board (RWQCB), it was agreed that additional work is still required before the County can recommend this site for closure.

There appears to be two areas of concern. Due to physical constraints, residual oil and grease remains in at least two areas, in the northwest corner of the shop bay and near the location of boring HB-2. Concentrations up to 2200 parts per million (ppm) of oil and grease exist near HB-2.

The other concern is that detectable amounts of chlorinated solvents were found in the grab water sample taken from the waste oil excavation pit. These levels exceeded the MCL (Maximum Contaminant Level) for these compounds. Chlorinated solvents were however never analyzed in any subsequent monitoring well events.

Because of these concerns, you are requested to monitor wells #1 and #6, those wells in closest proximity to the former waste oil pit and the location of boring HB-2, quarterly for a minimum of one year. These water samples should be analyzed for chlorinated solvents and for oil and grease. After this work is performed, the County will reconsider this case for recommendation for closure.

Mr. Alan Johnson Federal Express Corporation STID #545 May 12, 1992 Page 2.

You may contact me at (510) 271-4320 should you have any questions regarding this letter.

Sincerely,

Barney M. Chan

Hazardous Materials Specialist

cc: M. Thomsom, Alameda County District Attorney Office
Ms. Beverly Howell, Koll Real Estate Co., 5976 West Las
Positas Blvd., Pleasanton, CA 94588

S. Mills, IT Corporation, 4585 Pacheco Blvd., Martinez, CA 94553

R. Hiett, RWQCB

Barney Wille

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November 19, 1990

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

Mr. Alan Johnson Federal Express Corporation 8950 Cal Center Drive, Suite 370 Sacramento, CA 95826

Re: Stockpiled Soils at 8455 Pardee Drive, Oakland, Ca 94621

Dear Mr. Johnson:

This letter is in response to the Koll Company's request for documentation of the Division's position on the status of stockpiled soils at the above referenced site. These soils were from the former hydraulic oil tank location. The County is in receipt of copies of manifest numbers 90263042-90263047. The Department accepts these manifests as sufficient proof that stockpiled contaminated soils were properly removed and disposed of and now considers this issue resolved.

The County further agrees with the groundwater investigation/ remediation plan recommended by your consultant, International Technology Corporation. You are reminded that the County and the SFRWQCB should be copied with all reports generated by your consultant and further work will be dependent on the results of the ongoing investigation.

Please contact the undersigned at 271-4320, should you have any questions regarding this letter.

Sincerely,

Barney M. Chan

Barney Millian

Hazardous Materials Specialist

cc: Ms. Berverly Howell, Koll Company

Gil Jensen, Ala.Cty. Env. Health, Consumer and Environmental Protection Division

Lester Feldman, SFRWQCB Sydney Mills, ITC

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August 30, 1990

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

Mr. Alan Johnson Federal Express Corporation 8950 Cal Center Drive, Suite 370 Sacramento, CA 95826

Subject: Stockpiled Soils

8455 Pardee Drive, Oakland, CA

Dear Mr. Johnson:

This letter responds to the Koll Company's request for clarification on the Division's position on the status of stockpiled soils at the above shown site. The disposition of stockpiled soils was questioned in the Department's letter dated July 26, 1990.

Documentation verifying the proper disposal of stockpiled soils was submitted to the Department on September 29, 1990. The documentation was in the form of fax copies of manifest numbers 89930768-89930772. The Department accepts the manifests as sufficient proof that the stockpiled contaminated soils were properly removed and disposed of, and now considers this issue resolved.

Secondly, in conversations with representatives of the Koll Company, the Department was also requested to respond to the August 13, 1990, letter from Phyllis Osaki to Federal Express. In summary, the Department accepts the contents of the letter as correct to the point that it identifies the contaminant problem as it is known. It remains possible that additional contamination may be encountered in the course of ongoing investigative and remedial work, and if this becomes the case then additional excavation or other remedial work will be required.

It is the Department's responsibility to insure that all known contamination of a facility is properly addressed. Sign-off on remedial work is given at the completion of all required work for the facility, and not for phases of the job. With this point in mind, the Department will not consider the fuel tank phase of the project resolved until site sign-off can be given.

Federal Express August 30, 1990 Page 2

If you have any questions concerning the contents of this letter please feel free to call.

Sincerely,

Ariu Leyi, Senior Hazardous Materials Specialist Environmental Health Department

Rafat Shahid, Alameda County Environmental Health Gil Jensen, Alameda County District Attorney's Office Consumer and Environmental Protection Lester Feldman, SFRWQCB Sidney Mills, ITC



August 14, 1990

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

Mr. Alan Johnson Federal Express Corporation 8950 Cal Center Drive, Suite 370 Sacramento, CA 95826

Subject: Work Plan for Further Site Characterization 8455 Pardee Drivem, Oakland, CA

Dear Mr. Johnson:

This letter records the recent conversation between Sydney Mills of International Technology Corporation and the Alameda County Environmental Health Department, Hazardous Materials Division concerning the Work Plan for the site shown above. As discussed, the contents of the Plan are acceptable and further site assessment work can begin without further notice from this office. Comment on the potential remedial options will not be given at this time, but will be reserved for the Division's response to I.T. Corporations further findings.

If you have any questions concerning the contents of this letter please feel free to call.

Sincerely

Ariu Levi, Senior Hazardous Materials Specialist Environmental Health Department

cc: Rafat Shahid, Alameda County Environmental Health
Gil Jensen, Alameda County District Attorney's Office
Consumer and Environmental Protection

Lester Feldman, SFRWQCB

Sidney Mills, ITC



July 26, 1990

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

Mr. Alan Johnson Federal Express 8950 Cal Center Drive Sacramento, CA 95826

Subject: Unauthorized Release

Review of Work Progress

8455 Pardee

Oakland, CA 94621

Dear Mr. Johnson:

This letter responds to the Koll Company's request for an evaluation of the work done to date by IT Corporation at the above shown facility. It is the Division's understanding that IT Corporation has been the primary environmental consultant involved in the underground tanks and hydraulic lift removal and the required site assessment and remediation efforts.

As you know, the underground tanks and hydraulic lift were removed on 9/15/89 and 3/20/90. In the period from the initial field meeting to date several contacts have been made by representatives of IT to keep the the Division informed. In addition to informal contacts IT Corporation has submitted formal reports on the following dates:

11/1/89: Geotechnical Support of Underground Storage Tank Removal

-Fuel Tanks

2/8/90: Problem Assessment Report

4/30/90: Geotechnical Support of Underground Storage Tank Removal

-Waste Oil Tank and Hydraulic Lift

7/18/90: Sampling of Monitoring Wells

In response to concerns of Federal Express and the Koll Company the Division provided a letter dated 5/31/90. This letter identifies the reporting and documenting requirements of the the Regional Water Quality Control Board for eventual site sign-off. It is the responsibility of the contracted environmental consulting firm, in this case IT Corporation, to fully address these issues if site sign-off is the responsible party's final objective.

Federal Express July 26, 1990 Page 2

To this end, IT Corporation has addressed a portion of the assessment and documentation of assessment work. The issue of subsurface soil contamination has been confirmed but the 100ppm isoconcentration line has yet to be determined for both TPH and TOG in both the lateral and vertical sense. The study of impact to ground water began with the installation of three monitoring wells. Sampling is to continue for a full hydrologic event (one year), and it remains to be determined whether the discovered contaminant plume is contained onsite or whether offsite migration has occurred. Remedial work on the stockpiled soils and 100+ppm petroleum contaminated soils still inplace can begin upon submittal and approval of a work plan.

If you have any questions concerning the contents of this letter or the status of this case please feel free to contact me.

Sincerely,

Ariu Levi, Senior Hazardous Materials Specialist
Alameda County Environmental Health Department

cc:

Rafat Shahid, Alameda County Environmental Health Gil Jensen, Alameda County District Attorney's Office Consumer and Environmental Protection

Lester Feldman, SFRWQCB Howard Hatayama, DHS Beverly Howell, Koll Co. Sidney Mills, IT Corp. Certified Mail P 062 128 194

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

May 31, 1990

Federal Express 8950 Cal Center Drive Sacramento, CA 95826

Subject: Unauthorized Release

Underground Fuel and Waste Oil Tanks and Hydraulic Lift

Removal 8455 Pardee

Oakland, CA 94621

Dear Mr. Johnson:

Thank you for submitting the results for analysis of subsurface soil and ground water samples taken in response to the underground tank removals and the removal of hydraulic lifts from the above shown facility. Because of the degree of contamination found, this facility is considered to have experienced a confirmed release of petroleum hydrocarbons that has impacted subsurface soil and ground water. The extent of this contamination must be assessed and remediated.

Our office will be the lead agency overseeing both the soil and groundwater remediation of this site. The Regional Water Quality Control Board (RWQCB) is currently unable to oversee the large number of contamination cases within Alameda County and has delegated the handling of this case to our Division. We will be in contact with the RWQCB in order to provide you with guidance concerning the RWQCB's remediation requirements. However, please be aware that you are responsible for diligent actions to protect waters of the State.

The RWQCB have, in Guidance Documents, defined the reporting requirements that must be met for eventual site sign off. Contaminant assessment and proposed remedial activities for this facility have been addressed by IT Corp., to an extent, in reports already submitted to the office. Complete site work documentation must, though, address all the following points.

I. Introduction

A. Statement of scope of work

B. Site map showing location of existing and past underground storage tanks and lifts

C. Site History - provide historical site use and ownership information. Include a description of types and locations of hazardous materials used on site.

II. Site Description

- A. Vicinity description including hydrogeologic setting
- B. Initial soil contamination and excavation results
 - provide sampling procedures used
 - indicate depth to ground water
 - describe soil strata encountered
 - provide soil sampling results, chain of custody forms, identity of sampler
 - describe methods for storing and disposal of all soils

III. Plan for determining extent of soil contamination on site

- A. Describe approach to determine extent of lateral and vertical contamination
 - identify subcontractors, if any
 - identify methods or techniques used. As examples:
 - a) if a soil gas study is conducted include information on probe depths and slotting length, performance standards, & quality control measures including state certified lab analysis of samples.
 - b) if soil borings are conducted, provide information on boring placement, soil sample analysis, and boring logs.
 - c. if contamination is chased following an excavating step out procedure, provide field readings, if available, of side wall soil contamination.
 - provide sampling maps showing all lines of excavation and sampling points
 - provide chain of custody forms, lab analysis results,
 all receipts and manifests, identity of sampler
- B. Describe method and criteria for screening clean versus contaminated soils. Describe sampling procedure that confirms the "clean" soil is uncontaminated.

C. Describe security measures

IV. Disposition of Stockpiled Soils

Several alternatives exist for properly disposing of excavated soils impacted by leaking underground tanks. Depending on the concentration of TPH g or d or TOG within the waste, land disposal to a Class I, II, or III facility may be allowed. On site treatment of petroleum contaminated soils can occur, with proper permitting by the correct regulatory agencies (SDHS, BAAQMD, RWQCB) with the concentration of petroluem waste being the factor that determines what permits will be required. Onsite re-use of petroleum contaminated soils is also allowed under a strict set of conditions. general, onsite reuse of petroluem contaminated soils requires the submital of a Report of Waste Discharge pursuant to Section 13260 (a) of the California Water Code, and the application for a Waste Discharge Requirements (WDR). SFRWQCB can waive the WDR provided site specific conditions allow it, and the disposal is consistent with 23CCR, Subchapter 15 requirements. For stockpiled soils with a TPH or TOG concentration of ND to 10ppm, though, the SFRWQCB may allow on site disposal with out the need for a WDR or Subchapter 15 considerations. Verification of stockpile concentration of ND to 10ppm must be conducted by discrete sampling at the rate of one sample per 20 cubic yards. The disposition of all stockpiles must be addressed in a workplan.

- A. If contaminated stockpile soil aeration or bioremediation is to be utilized, then provide a work plan that includes:
 - volume and rate of aeration/turning
 - method of containment and cover
 - confirmatory sampling procedure to verify acceptable levels of TPH or TOG for intended method of disposal.
 - permits obtained

IV. Plan for determining ground water contamination

- Construction and placement of wells should adhere to the requirements of the "Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks". Provide a description of placement and rationale for the location of monitoring wells including a map to scale.
- The placement and number of wells must be able to determine the extent and magnitude of the free product and dissolved product plumes.
- A. Drilling method for construction of monitoring wells
 - expected depth and diameter of monitoring wells

- date of expected drilling

- casing type, diameter, screen interval, and pack and slot sizing techniques

- depth and type of seal

- development method and criteria for adequacy of development by
- plans for cuttings and development water
- B. Ground water sampling plan
 - method for free product measurement, observation of sheen
 - well purging procedures
 - sample collection procedures
 - chain of custody procedures
 - procedures for determining ground water gradient
- D. Sampling schedule
 - measure free product weekly for first month following well installation
 - measure free product and dissolved constituents monthly for first three months.
 - after first three months monitor quarterly.
 - monitoring must occur a minimum of one year.
- V. Provide a site safety plan

VI Development of a Remediation Plan.

- A. The remediation plan is to include a time schedule for remediation, and, at minimum, must address the following issues:
 - removal of all free product. Manual bailing is not acceptable as a recovery system. Actual amount of free product removed must be monitored and tabulated.
 - remediation of contaminated soils and dissolved constituents must follow RWQCB's resolution No. 68-16.
 - soils containing 1,000+ ppm of hydrocarbons must be remediated. Soils containing between 100 and 1,000 ppm must be remediated unless sufficient evidence is provided which indicates no adverse effects on groundwater will occur. Clean up of soils to 100 ppm is strongly recommended.
 - design of remedial action system should be based on a review of hydrogeologic and water quality data and on an evaluation of mitigation alternatives. The determination of probable capture zone(s) of extraction system(s) should be based on aquifer characteristics as determined by aquifer test data.

VII Reporting

- A. Technical reports should be submitted with a cover letter from Federal Express. The letter must be signed by a principal executive officer or by an authorized representative of that person.
- B. Monthly reports must be submitted for the next three months with the first report due 90 days from the above letter date.
- C. Quarterly reports must be submitted with the first report due 90 days after the final monthly report. These reports should describe the status of the investigation and cleanup.
- D. All reports and proposals must be signed by a California-Certified Engineering Geologist, California Registered Geologist or a California-Registered Civil Engineer (see page 2, 2 June 1988 RWQCB document).

A statement of qualifications should be included in all reports. Initial tank removal and soil sampling does not require such expertise; however, borehole and monitoring well installation and logging, and impact assessments do require such a professional.

All proposals, reports and analytical results pertaining to this investigation and remediation must be sent to our office and RWQCB. You should be aware that this Division is working in conjunction with the RWQCB and that this is a formal request for technical reports pursuant to California Water Code Section 13267 (b).

Should you have any questions concerning the contents of this letter or the status of this case please feel free to contact me.

Sincerely.

Ariu Levi, Senior Hazardous Materials Specialist Alameda County Environmental Health Department

cc: Gil Jensen, Alameda County District Attorney, Consumer Environmental Prtotection
Rafat Shahid, Assistant Agency Director
Lester Feldman, SFRWQCB
Howard Hatayama, DOHS
Inspector Dawson, OFD
Sidney Mills, IT Corp.
Beverly Howell, Koll Co.
Files