CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NUMBER 90-121

SITE CLEANUP REQUIREMENTS FOR:

HEXCEL CORPORATION and
F & P PROPERTIES
ABANDONED DISPOSAL SITE
NORTH MINES ROAD
LIVERMORE
ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. SITE DESCRIPTION Hexcel Corporation (Hexcel), hereinafter referred to as a discharger, operated a landfill near North Mines Road, Livermore, Alameda County (Site, Appendix D, Figure 1). F & P Properties (F&P), hereinafter referred to as discharger, is the current property owner. In the event that Hexcel does not comply with the requirements of this Order, F&P will be required to comply with this Order. The site is located in the central portion of the Amador-Livermore Valley, broadly bounded by Arroyo Mocho to the southwest, Arroyo Seco to the east and I-580 to the north. Hexcel, it's predecessor company Coast Manufacturing and Supply (CMS) and others, disposed of industrial and municipal wastes at the site since the early 1900s.

2. SITE HISTORY The site has been in use since 1906, when the area was used as a borrow site by the Western Pacific Railroad for the adjacent railroad embankment construction. Beginning in 1911 at the present location of the Hexcel plant, CMS manufactured black powder, detonation cord, blasting caps, and later, fiberglass and plastics until the late 1960s. Apache Powder Company purchased CMS' black powder interests in 1967. Hexcel purchased the fiberglass and plastics interests of CMS and the manufacturing facility in 1968. Industrial wastes from explosives and fiberglass materials manufacturing had been dumped and burned in the borrow pit area from the 1920s into the mid 1950s, until state air quality regulations prohibited refuse burning and required waste disposal by cut and cover methods.

   A domestic sewage drain field was constructed in 1955 in the southwest quarter of the ADS (Figure 2, Appendix D). Industrial and domestic sewage drained into a series of three eastward cascading evaporation ponds. Sewage flow ranged from between 2,500 gpd in 1958 to 24,000 gpd in the mid 1970s. Sewage disposal continued until 1977, when Hexcel connected the sewage outfall to the municipal sewer system.

   Hexcel sold the property which contained the former borrow pit, waste disposal site and sewage drain field to Donald W. and Suzanne T. Smith in March, 1979. The property was sold in 1985 to F&P Properties, the current owners. It is unknown if the Smiths have had any contribution to the site pollution. Board staff will request

information from the Smiths about site use during their ownership. EPA is currently conducting a potential responsible party (PRP) search. If it is determined that the Smiths, or any other parties are found to have been responsible for waste disposal in the ADS, these parties also shall be named as dischargers in this Order.

3. REGULATORY STATUS Regional Board staff has been monitoring the ADS for the last year under a quarterly groundwater monitoring program. No other formal enforcement actions have been taken at the site. The abandoned disposal site is currently proposed to be included along with Hexcel's Composite Materials Manufacturing Plant at 10 Trevarno Road on the National Priorities List as a Superfund site. The ADS will be considered as a separate operable unit apart from Hexcel's current manufacturing facility.

4. HYDROGEOLOGY The site is located in the Livermore Valley within the Mocho Groundwater Subbasin (Appendix D, Figure 3). Hexcel is located over the Mocho I Province of the Mocho Subbasin. The site is underlain by younger Quaternary alluvium of low-to-moderate permeability derived from the underlying Plio-Pleistocene non-marine Livermore Formation. Subsurface contacts at the site between the alluvium and underlying Livermore Formation are described as a paleosol and are referenced in reports from offsite groundwater investigations. Outcrops of Livermore Formation rocks are found in the low-lying hills northwest and southeast of the property and forms a northwest-trending low topographic saddle that forms the boundary between the Mocho I and Mocho II Provinces. The thickness of the Quaternary alluvium ranges from zero at the base of the hills to about 50 feet thick at the center of the Mocho 1 Province, east of the site.

Two shallow water-bearing zones have been described at the site. A perched zone was encountered beneath the site from 18 to 22 feet deep. The next water-bearing zone is between 20 and 35 feet deep. Water levels stabilized approximately 15 feet below the surface, indicating semi-confined conditions. Aquifer materials of weathered Livermore Formation form discontinuous lenses of clayey silt, sand and gravel, separated by a sandy clay layer between 15 and 30 feet in depth. The groundwater gradient beneath the ADS slopes westerly to northwesterly (Appendix D, Figure 4).

Three sites adjacent to the ADS are known to have halogenated solvent groundwater pollution. They are; 1) Intel Corporation Fab III facility about 300 feet northwest from the west edge of the ADS, 2) the former Industrial Ladder facility about 200 feet to the north of the ADS, and 3) the Hexcel composite materials manufacturing plant just south of the ADS. Monitoring wells at the Hexcel manufacturing plant have sporadically shown low levels of VOCs in the groundwater.

5. SOIL AND GROUNDWATER INVESTIGATIONS Site assessment work began in November, 1985 after a RWQCB request to initiate site investigations. A preliminary site assessment report was prepared preceding field work proposals. Results of initial field investigations were published in December, 1986, titled "Results of Drilling and Sampling at an Abandoned Waste Disposal Site, Livermore, California". This report summarized the results from the installation of nine groundwater monitoring wells and two soil borings. Additional work was completed in a Phase II report to better understand the site conditions. Further assessment work was conducted for an EIR for proposed

property development by the present property owners. Future property developments are to be designed around the identified boundaries of the ADS.

6. SITE POLLUTION Groundwater pollution has been detected at low levels in several perimeter monitoring wells. Chemicals found in the groundwater include 1,2-dichloroethane at 23 ppb, benzene at 10 ppb and lead at 78 ppb. These pollutants are associated with water samples collected from wells nearest to an existing business. Other compounds detected in groundwater, that are below MCLs, include toluene, xylene, carbon tetrachloride and chloroethane.

   The ADS is estimated to be a maximum of 20 feet deep. An assortment of industrial and domestic wastes are believed to have been dumped in the ADS. These may include: automobiles, machinery, fiberglass, asbestos, plastics, nitrates, resins, pigments, rags, epoxy, black powder residue, blasting caps, metal barrels, household wastes and road construction wastes. Little work has been performed in the interior portion of the site due to the likelihood of encountering large pieces of waste or contacting explosive wastes. The site boundaries have been defined by a soil boring program conducted by the present owners. VOCs have not been detected in samples analyzed from soil borings.

7. INTERIM REMEDIAL ACTIONS No interim actions have been performed to date. Interim measures discussed in the SEIR and proposed by F&P includes complete removal of buried wastes, no action, or installation of a cap. Regional Board staff commented on the SEIR proposals and found no action and capping alternatives inadequate. The dimensions of the ADS have been defined by soil sample analyses from the installation of perimeter monitoring wells, subsurface geophysical methods and exploratory soil borings. The site is currently used as a storage area for heavy construction equipment and large diameter reinforced concrete pipe. A heavy vehicle repair shop operates on the west edge of the property and may be contributing to site pollution.

   Investigation efforts to date have generally defined the areal extent of waste disposal. However, the lateral and vertical extent of the waste mass(es) have not been investigated. Additional work is necessary to sufficiently define the extent and composition of site pollution and evaluate final cleanup alternatives.

8. This order contains tasks for completion of a Sampling and Analysis Plan which contains the Quality Assurance Project Plan and Field Sampling Plan, a Health and Safety Plan, a Data Validation Package, development of the Administrative Record, and a Comprehensive Data Summary to review past site assessment reports in order to evaluate data gaps and deficiencies. These tasks are necessary to implement a well directed final RI/FS/RAP that does not duplicate past site assessment work or errors. This order will also provide a substantive technical basis for designing and evaluating the effectiveness of final cleanup alternatives.

9. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986. The Basin Plan contains water quality objectives and beneficial uses for the Amador-Livermore Valley and contiguous surface and ground waters.

10. The existing and potential beneficial uses of the groundwater underlying and adjacent to the facility include:

    a. industrial process water supply
    b. industrial service water supply
    c. municipal and domestic water supply
    d. agricultural water supply

    Shallow groundwater beneath the ADS is a source of drinking water as defined by Regional Board Resolution 88-63, "Sources of Drinking Water", adopted in 1988.

11. The existing and potential beneficial uses of Arroyo Mocho and Arroyo Seco as tributaries to Arroyo De la Laguna include:

    a. groundwater recharge
    b. recreation
    c. warm and cold fresh water habitat
    d. wildlife habitat
    e. fish migration and spawning

12. The discharger has caused or permitted, and threatens to cause or permit waste to be discharged or deposited where it is or probably will be discharged to waters of the State and creates or threatens to create a condition of pollution or nuisance.

13. This action is an order to enforce the laws and regulations administered by the Board. This action is categorically exempt from the provisions of the CEQA pursuant to Section 15321 of the Resources Agency Guidelines.

14. The Board has notified the dischargers and interested agencies and persons of its intent under California Water Code Section 13304 to prescribe Site Cleanup Requirements for the site, and has provided them with the opportunity for a public hearing and an opportunity to submit their written views and recommendations.

15. The Board, in a public meeting heard and considered all comments pertaining to the Site.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the dischargers shall cleanup and abate the effects described in the above findings as follows:

A. <u>PROHIBITIONS</u>

1. The discharge of wastes or hazardous materials in a manner which will degrade water quality or adversely affect the beneficial uses of the waters of the State is prohibited.

2. Further significant migration of pollutants through subsurface transport to waters of the State is prohibited.

3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of pollutants are prohibited.

B. SPECIFICATIONS

1. The storage, handling, treatment or disposal of soil or groundwater containing pollutants shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. The dischargers shall conduct site investigation and monitoring activities as needed to further define the current local hydrogeologic conditions, and the lateral and vertical extent of soil and groundwater pollution. Should monitoring results show evidence of pollutant migration, additional characterization of pollutant extent may be required. Within 60 days of the Executive Officer's determination and actual notice to F & P Properties that Hexcel has failed to comply with this paragraph, F & P Properties as landowners, shall comply with this specification.

3. Final cleanup levels and goals for polluted groundwater shall be background water quality if feasible, but shall not be greater than the DHS drinking water Action Level (AL) or Maximum Contaminant Level (MCL), whichever is more stringent. If an AL or MCL has not been established, the level shall be in accordance with the State Water Resources Control Board's Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California", based on an evaluation of the cost, effectiveness and a risk assessment to determine affect on human health and the environment. These levels shall have a goal of reducing the mobility, toxicity, and volume of pollutants. Final cleanup levels shall be approved by the Board.

4. If it is determined by the Executive Officer that polluted soils need to be remediated, the cleanup goal is 1 ppm for total VOCs. This goal may be modified by the Executive Officer if the discharger demonstrates with site specific data that higher levels of VOCs in the soil will not threaten the quality of waters of the State or that cleanup to this level is infeasible and human health and the environment are protected.

5. If groundwater extraction and treatment is considered as an alternative, the feasibility of water reuse, reinjection, and disposal to the sanitary sewer must be evaluated. Based on the Regional Board Resolution 88-160, the dischargers shall optimize, with a goal of 100%, the reclamation or reuse of groundwater extracted

as a result of cleanup activities. The dischargers shall not be found in violation of this Order if documented factors beyond the discharger's control prevent the dischargers from attaining this goal, provided the dischargers have made a good faith effort to attain this goal. If reuse or reinjection is part of a proposed alternative, an application for Waste Discharge Requirements may be required. If discharge to waters of the State is part of a proposed alternative, an application for an NPDES permit must be completed and submitted, and must include the evaluation of the feasibility of water reuse, reinjection, and disposal to the sanitary sewer.

C. PROVISIONS

1. The discharger shall comply with the Prohibitions and Specifications of this Order in accordance with the following task and time schedule:

TASKS AND COMPLETION DATES

a. TASK: SAMPLING AND ANALYSIS PLAN (SAP)

Submit a technical report acceptable to the Executive Officer containing a Sampling and Analysis Plan containing elements of a Quality Assurance Project Plan (QAPP), a Quarterly Groundwater Sampling and Analysis Plan and a Field Sampling Plan (FSP). The SAP should be prepared using CERCLA guidance documents and shall contain the elements of the QAPP and FSP.

COMPLETION DATE: November 30, 1990

b. TASK: DATA VALIDATION PACKAGE

Submit a technical report acceptable to the Executive Officer that describes the proposed Data Validation procedures to be utilized for new sampling and analyses at the Hexcel site. All samples shall be analyzed by laboratories certified to perform analysis on Hazardous Materials or laboratories using approved EPA methods or an equivalent method acceptable to the Executive Officer. The dischargers shall request laboratories to follow California Department of Health Services guidance "Documentation Requirements for Project Data Packages" dated December 29, 1989 for preparation of data validation packages when required by

the Executive Officer. The dischargers shall request the laboratories to maintain quality assurance/quality control records for Regional Board review for a period of six years and will inform the Regional Board of each laboratory's response.

COMPLETION DATE: November 30, 1990

c. TASK: COMPREHENSIVE DATA SUMMARY, HEALTH AND SAFETY PLAN AND WORKPLAN FOR COMPLETION OF RI/FS:

Submit a technical report acceptable to the Executive Officer that summarizes all past site assessment work. The document shall contain at least the following information: specific references to documents if not readily available, plan view maps with adjacent culture indicating locations of all wells and soil borings, tabulated site specific soil and groundwater quality analyses including test methods, potentiometric surface maps and plume maps. The report shall contain an analysis of presented data and identify data gaps using CERCLA guidance for conducting Remedial Investigations (RI) and Feasibility Studies (FS).

The report shall include a Health and Safety Plan (HASP) which will identify and evaluate risks that may be encountered during site environmental assessment work. The plan shall include precautions that may be necessary to avoid serious threats to health and provisions to be undertaken in the event chemical exposures or injuries occur. The HASP may be attached as an appendix to the RI/FS workplan.

The report shall contain a proposed workplan for an RI/FS and a time schedule for submittal of the completed RI/FS report.

COMPLETION DATE: November 30, 1990

d. TASK: BASELINE PUBLIC HEALTH EVALUATION WORKPLAN:

Submit a technical report acceptable to the Executive Officer containing a workplan for the completion of a baseline public health evaluation prepared in accordance with Risk Assessment Guidance for Superfund Human Health Evaluation Manual (EPA 540/1-89/002, December, 1989).

COMPLETION DATE: December 30, 1990

e. TASK: ADMINISTRATIVE RECORD:

Submit a proposal acceptable to the Executive Officer to compile and index an Administrative Record as outlined in EPA Interim Draft Guidance on Administrative Records for Selection of CERCLA Response Actions.

COMPLETION DATE: December 30, 1990

2. The submittal of technical reports evaluating additional final remedial measures will include a projection of the cost, effectiveness, benefits, and impact on public health, welfare, and environment of each alternative measure. If any additional remedial investigations or feasibility studies are found to be necessary, they shall be consistent with the guidance provided by Subpart E of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300), Section 25356.1 (c) of the California Health and Safety Code, CERCLA/SARA guidance documents, the State Board's Resolution No. 68-16, and this Order.

3. If the dischargers are delayed, interrupted or prevented from meeting one or more of the completion dates specified in this Order, the dischargers shall promptly notify the Executive Officer.

4. The dischargers shall submit to the Regional Board acceptable reports on compliance with the requirements of this Order, and acceptable activity monitoring reports that contain descriptions and results of work performed. These reports are to be submitted according to a program prescribed by the Regional Board and outlined below.

a. ON A MONTHLY BASIS, technical reports on the status of compliance with this Order shall be submitted to the Board, commencing on January 30, 1991 and due on the last day of each following month. Each report may be in a letter format covering the previous month and shall include, but are not limited to, the following:

1) Summary of work completed since submittal of the previous report, and work projected to be completed by the time of the next report.

2) Identification of any obstacles which may threaten compliance with the schedule of this Order and what actions are being taken to overcome these obstacles.

3) Written notification which clarifies the reasons for non-compliance with any requirement of this Order, and which proposes specific measures and a schedule to achieve compliance. This written notification shall identify work not completed

that was projected for completion, and shall identify the impact of non-compliance on achieving compliance with the remaining requirements of this Order.

b. ON A QUARTERLY BASIS, technical compliance reports on groundwater monitoring shall be submitted to the Board, commencing with the January through March, 1991 calendar quarter. The quarterly reports shall be due on the last day of the month following the previous quarter and may include the monthly report due concurrently, beginning with the March 31, 1991 monthly report included in the April 30, 1991 quarterly report. The quarterly reports shall include, but need not be limited to, the following information:

1) Tabulated analytical results of quarterly groundwater quality sampling analyses for all monitoring wells specified in the monitoring program using analytical methods specified in Provision C.1.a., and updated groundwater pollution plume maps based on these results.

2) Updated potentiometric surface maps, based on the most recent quarterly water level measurements for all affected water bearing zones monitored by onsite and offsite wells.

3) If groundwater extraction is a part of cleanup, include a cumulative tabulation of volume of extracted groundwater, quarterly analysis results for all groundwater extraction wells, and pounds of chemicals removed.

4) Updated well construction details for any additional wells that have been installed during the quarter.

5) Updated or revised reference diagrams including geologic cross-sections and appropriately scaled and detailed base maps showing the location of all monitoring wells and extraction wells, and identifying adjacent facilities and structures.

6) Identification and notification of non-compliance with groundwater monitoring requirements of this Order, as described in Provisions 5.a.2. and 5.a.3.

c. ON AN ANNUAL BASIS, technical reports on the progress of compliance with all requirements of this Order shall be submitted to the Board, commencing on January 30, 1992, and covering the previous year. Annual reports may include monthly and quarterly reports due concurrently. The progress reports shall include, but need not be limited to, progress on the site investigation and remedial actions, operation of interim and final remedial actions and/or systems, and the feasibility of meeting groundwater and soil cleanup goals.

5. All hydrogeological plans, specifications, reports, and documents shall be signed by or stamped with the seal of a California registered geologist or professional engineer, or a certified engineering geologist .

6. The discharger shall maintain in good working order, and operate, as efficiently as possible, any facility or control system installed to achieve compliance with the requirements of this Order.

7. Copies of all correspondence, reports, and documents pertaining to compliance with this Order shall be provided to the following agencies:

   a. Alameda County Flood Control District, Zone 7
   b. Alameda County Health Department (Gil Wistar)
   c. City of Livermore (John Hines)
   d. U.S. Environmental Protection Agency, Region IX (Patti Collins)
   e. Local repository for the Administrative Record to be determined

8. The discharger shall permit the Board or its authorized representative, in accordance with Section 13267(c) of the California Water Code:

   a. Entry upon dischargers' premises in which any pollution sources exist, or may potentially exist, or in which any required records are kept, which are relevant to this Order.

   b. Access to copy any records required to be kept under the terms and conditions of this Order.

   c. Inspection of any monitoring equipment or methodology implemented in response to this Order.

   d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the dischargers.

9. If any hazardous substance is discharged to any waters of the state, or discharged and deposited where it is, or probably will be discharged to any waters of the state, the discharger shall report such discharge to this Regional Board, at (415) 464-1255 on weekdays during office hours from 8 a.m. to 5 p.m., and to the Office of Emergency Services at (800) 852-7550 during non-business hours. A written report shall be filed with the Regional Board within five (5) working days and shall contain information relative to the nature of waste or pollutant, quantity involved, duration of incident, cause of spill, Spill Prevention, Control and Countermeasure Plan (SPCC) in effect, if any, estimated size of affected area, nature of effect, corrective measures that have been taken or planned, and a schedule of these activities, and persons/agencies notified.

10. The Board will review this Order periodically and may revise the requirements when necessary.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of any Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on August 15, 1990.

Steven R. Ritchie
Executive Officer