

REPORT ON THE
REMOVAL OF UNDERGROUND STORAGE TANKS
AND SUMP CLOSURE

LONGVIEW FIBRE COMPANY
OAKLAND, CALIFORNIA
FACILITY
8511 Blaine St.

FOR
LONGVIEW FIBRE COMPANY
P.O. BOX 639
LONGVIEW, WASHINGTON 98632

Prepared by:
CH2M HILL

FEBRUARY 1988



Engineers
Planners
Economists
Scientists

February 26, 1988

F24103.A0

David N. Mendenhall
Water Quality Engineer
Longview Fibre Company
P.O. Box 639
Longview, Washington 98632

Dear David:

Enclosed is a copy of our Report on the Removal of Under-ground Storage Tanks and Sump Closure for Longview Fibre's Oakland, California, facility. A copy of this report has been sent directly to Worth Cornelius in Oakland.

A separate report will be prepared describing the remedial investigation of the site's groundwater and subsequent remedial actions associated with the presence of petroleum hydrocarbons in the groundwater.

A revision to the current task order is being prepared for the costs associated with Item 7, Laboratory Analysis, and with additional time in the field required to remove the tanks and sump, and for the completion of remedial measures for the contaminated soil found on site. The revision will also include additional costs for the proposed installation and monitoring of a groundwater monitoring well.

Should you have any questions regarding this report, please contact either Jack Payne at (503) 224-9190 or me at (415) 652-2426.

Sincerely,

A handwritten signature in cursive script that reads "Deanne Fischer".

Deanne Fischer, P.E.
Project Manager

SFR59/d.2

Enclosure

cc: Worth Cornelius, Longview Fibre Co., Oakland Facility
Jack Payne, CH2M HILL/PDX

CONTENTS

Introduction
Background
Project Scope
Recommendations

Table 1: Chronology of Field Activities

Appendix A: Location Map and Site Plan
Appendix B: Project Specifications
Appendix C: Permits and Closure Plan
Appendix D: Uniform Hazardous Waste Manifest
Appendix E: Analytical Results
Appendix F: Remedial Action Plan
Appendix G: Photographs

UNDERGROUND STORAGE TANK AND SUMP CLOSURES
LONGVIEW FIBRE COMPANY OAKLAND FACILITY

INTRODUCTION

Four underground petroleum storage tanks were excavated and removed at the Longview Fibre Company (LFCO) Oakland facility during the period from December 22, 1987, through January 26, 1988. Two were 10,000-gallon diesel tanks (T-1 and T-2), one was a 3,000-gallon diesel tank (T-3), and one was a 150-gallon gasoline tank (T-4). In addition, one sump was closed. This report is a summary of the tank and sump closures.

Photographs accompany this report in Appendix G.

BACKGROUND

The LFCO Oakland facility had four underground petroleum storage tanks. A facility location map and site plan showing the location of the tanks are included in Appendix A. Three of the tanks stored diesel as a back-up fuel source for the facility's natural gas boilers. Tank T-3 was installed when the facility was built in the early 1950s. Tanks T-1 and T-2 were installed in the early 1970s. Tank T-4 stored gasoline for the facility's fire protection water pump. CH2M HILL's understanding was that the tanks had not been tightness tested since being installed and that LFCO did not know if any of the tanks were leaking.

The three diesel storage tanks were located in the courtyard, at the only access to the facility. Truck access to the plant was to be maintained during all phases of construction. In addition, an above ground starch tank and silicate tank were located near Tank T-3. The integrity of these above-ground tanks was to be maintained throughout the project. Tank T-4 was located next to the fire protection water pump house at the southwest corner of the facility.

PROJECT SCOPE

The project scope included developing plans and specifications for the removal of the four underground tanks. A copy of the specification is included in Appendix B. Contractor bids for the project were received on December 15, 1987. CH2M HILL reviewed the bids and assisted LFCO in the selection of the contractor to perform the work. CH2M HILL obtained the required underground tank removal permits from the Oakland Fire Department and submitted the required Closure Plan to the Alameda County Environmental Health Department. Copies of the permits and Closure Plan are included in Appendix C.

The excavation and removal of the tanks was to be performed in accordance with applicable state and local regulatory requirements. In accordance with Regional Water Quality Control Board regulations, all soil with contamination levels at or exceeding 1,000 ppm Total Petroleum Hydrocarbons (TPH) was to be excavated and disposed of at a Class I disposal site. Because of their close proximity to surrounding structures, Tanks T-3 and T-4 had to be located to determine if they would be closed in place or removed. A chronological summary of activity during the removal of the tanks is provided in Table 1.

PERSONNEL

Riedel Environmental Services (the selected contractor) performed the tank removals with Forrest Canutt supervising the contractor crew. Deanne Fischer of CH2M HILL observed the removal of the tanks.

Ariu Levi of the Alameda County Environmental Health Department and Inspector Collins of the Oakland Fire Department were present for the removal of Tanks T-1 and T-2 on December 24, 1987. Ariu Levi and Mary Jo Meyers of the Alameda County Environmental Health Department and Inspector Dawson of the Oakland Fire Department were present for the removal of Tanks T-3 and T-4 on January 12, 1988.

TANKS T-1 AND T-2

The two 10,000-gallon diesel tanks were located side-by-side in the main courtyard at the entrance to the LFCO facility. They were cleaned in place with a high pressure water and degreaser solution and rinsed. The tank contents and rinse water were disposed of by H&H Ship Service, who hauled the liquid and recycled it at their site. The manifest form is included in Appendix D. The contractor placed approximately 100 lbs of dry ice in each of the tanks and checked for explosive vapors prior to pulling them from the excavation. The tanks were in a sandy backfill material, which was excavated and stockpiled on the surface. The tanks were also sitting in groundwater at a depth of approximately 9 feet from the surface. Some staining was evident in the soil as was a visible sheen of petroleum product on the groundwater.

Upon removal, the tanks were visually inspected. No holes, leaks, or broken seams were found. The piping was also inspected upon removal. The pipes were rusty and a hole (approximately 2-inches in diameter) was found in one section of pipe. After receiving the rinsewater sampling results, holes were cut in the tanks and they were transported and disposed of as scrap metal at Levin Metals in Richmond, California. The associated piping was completely removed and also disposed of at Levin Metals.

FP

Table 1
CHRONOLOGY OF FIELD ACTIVITIES
LONGVIEW FIBRE COMPANY

December 22, 1987	<ul style="list-style-type: none">o Emptied Tanks T-1 and T-2o Washed and rinsed Tanks T-1 and T-2
December 23, 1987	<ul style="list-style-type: none">o Excavated Tanks T-1 and T-2
December 24, 1987	<ul style="list-style-type: none">o Removed Tanks T-1 and T-2o Sampled excavation and excavated material
December 26, 1987	<ul style="list-style-type: none">o Used excavated material to stabilize eastern excavation wallo Received sampling results indicating soil near T-2 contains TPH greater than 1,000 ppm
December 29, 1987	<ul style="list-style-type: none">o Located sump
December 31, 1987	<ul style="list-style-type: none">o Located Tank T-3o Used excavated material and imported material to stabilize northern wall of excavation
January 4, 1988	<ul style="list-style-type: none">o Cut and transported Tanks T-1 and T-2 for disposal
January 11, 1988	<ul style="list-style-type: none">o Broke concrete for remedial excavation to remove soil exceeding 1,000 ppmo Uncovered Tank T-3
January 12, 1988	<ul style="list-style-type: none">o Emptied Tank T-3 and Tank T-4o Emptied sumpo Dewatered excavationo Excavated Tank T-3o Excavated and removed Tank T-4o Removed Tank T-3o Sampled groundwater in T-3 excavation

Table 1
(Continued)

January 13, 1988	<ul style="list-style-type: none">o Sampled soil in T-4 excavationo Used excavated material to stabilize the west wall of excavation near the starch tanko Backfilled Tank T-4 vaulto Sampled excavation as required for removal of Tank T-3o Sampled stockpiled material from T-3 excavationo Excavated contaminated area for remediation purposes; resampled soil at Southeast corner of excavationo Collected additional soil sample from east end of the excavations south wall
January 14, 1988	<ul style="list-style-type: none">o Removed contaminated soil excavated from around T-2 from siteo Received sampling results for T-4 indicating nondetectable levels of TPH
January 15, 1988	<ul style="list-style-type: none">o Received sampling results for stockpiled materials from T-3 excavation indicating nondetectable levels of TPHo Began backfilling the excavationo Received additional sampling results indicating that TPH levels are nondetectable in all areas except the southeast corner of the excavation
January 18, 1988	<ul style="list-style-type: none">o Began backfilling the excavation
January 19, 1988	<ul style="list-style-type: none">o Excavated material at the southeast corner of the excavation for remediationo Sampled southeast corner of excavation

Table 1
(Continued)

January 20, 1988	<ul style="list-style-type: none">o Emptied and rinsed sumpo Broke hole in bottom of sump for samplingo Received sampling results for southeast corner of excavation indicating nondetectable levels of TPHo Removed excavated "remediated" material from siteo Collected soil sample from below the sumpo Laid and compacted base rock
January 21, 1988	<ul style="list-style-type: none">o Cut concreteo Completed base rock liftso Received sample results for sump indicating non-detectable levels of TPH and heavy metal levels below the TTLCs
January 22, 1988	<ul style="list-style-type: none">o Completed grading excavation and cleaning edges of existing concrete edgeso Prepared for pouring concrete
January 25, 1988	<ul style="list-style-type: none">o Tied rebar and placed premolded joint filler
January 26, 1988	<ul style="list-style-type: none">o Poured concrete

Two groundwater samples (LVF-GW-3 and LVF-GW-4) were collected and analyzed for TPH in compliance with requirements in the Guidelines for Addressing Fuel Leaks, California Regional Water Quality Control Board, San Francisco Bay Area Region (RWQCB). At the request of the Alameda Environmental Health Department, soil samples were collected from the walls of the excavation near the groundwater surface at each end of each tank and from the backfill at the center of the excavation between the two tanks. Two additional soil samples were collected from the stockpiled excavated material and were composited in the lab for analysis.

The results from the two soil samples (LVF-SS-2 and LVF-SS-4) collected from either end of tank T-2 indicated TPH concentrations equal to or exceeding 1,000 ppm. The results from the three other soil samples (LVF-SS-1, LVF-SS-3, and LVF-SS-5) collected from the excavation indicated TPH concentrations below 1,000 ppm. The composited samples from the stockpiled excavated material (LVF-STOCKPILE-1 and LVF-STOCKPILE-2) indicated TPH concentrations of 1,200 ppm. The results from the collected groundwater samples indicated TPH concentrations of 160,000 and 80,000 ppm. A map showing the sample locations and the corresponding analytical results is included in Appendix E.

Due to the high TPH concentrations found in the southeast and southwest corners of the excavation, the hole was not immediately backfilled. Because of the high density traffic near the excavation, some of the stockpiled excavated material was placed back in the hole to support the walls of the excavation.

A Remedial Action Plan (RAP) was immediately developed. The plan included additional excavation to remove the soil with TPH concentrations exceeding 1,000 ppm and the installation of a downgradient monitoring well as required in the RWQCB Guidelines for Addressing Fuel Leaks. A copy of the RAP is included in Appendix F.

TANK T-3

The 3,000 gallon diesel tank was located in the same courtyard as T-1 and T-2 and was partially exposed during the excavation of these tanks. The age of T-3 was estimated to be approximately 35 years. Because the tank was located so near to an aboveground starch tank and an aboveground silicate tank, Riedel Environmental Services was tasked to determine the actual size and location of T-3 prior to excavation. After locating the end of the tank using a high pressure water probe, Riedel hired a registered civil engineer, James Wong, of Oakland, California, to develop a protection plan for the excavation as specified in the contract documents. James Wong decided that no additional protection would be needed for the starch tank or silicate tank during the excavation of Tank T-3.

Tank T-3 was emptied and rinsed prior to excavation. The contents and rinseate were transported and disposed of by H&H Ship Service. The manifest form is included in Appendix D. The contractor added dry ice and checked for explosive vapors in the tank. The contractor cut holes in the tank for transportation and disposal at Levin Metals. The piping was disposed of at Levin Metals.

The tank was visually inspected upon removal. After scraping off some of the rust on the tank, numerous holes were visible in the shell along the bottom of the tank. The holes were approximately 1/4-inch in diameter. A hole approximately 2-inches in diameter was also located in one of the pipes.

The tank was installed in a sandy backfill material and was sitting in groundwater. The depth to groundwater was approximately 9 feet below the ground surface. No staining was evident in the surrounding soil, however, a sheen of petroleum product was visible on the groundwater. A groundwater sample (LVF-E2-T3-GW-1) was collected from the excavation. Two soil samples were also collected at the request of the Alameda County Environmental Health Department. The two samples were collected from each end of the tank location. One sample (LVF-E2-T3-S-1) was collected from the west wall of the excavation near the groundwater surface, and the other (LVF-E2-T3-S-2) was collected from the south wall near the surface of the groundwater. The samples were analyzed for TPH concentrations. The excavated material was stockpiled in the hole and then relocated for support of the west wall of the excavation near the starch tank. Two samples were collected from the stockpile and composited in the lab for analysis.

Results from the soil samples indicated that TPH concentrations were less than 1,000 ppm. Thus, it was decided that the excavated material would be used in backfilling the excavation. The results from the groundwater sample indicated TPH concentrations of 170 ppm. Copies of the analytical reports and the sampling location map are included in Appendix E.

TANK T-4

Tank T-4 was a gasoline storage tank located at the southwest corner of the facility, off 86th Avenue. The tank capacity was approximately 150 gallons. The tank contents were pumped out by H&H Ship service and the tank was rinsed. The contractor added dry ice and checked for explosive vapors in the tank prior to removing it from the vault. The tank was installed in sand in a bottomless concrete vault. No staining was evident in the sand backfill material.

Tank T-4 was visually inspected upon removal. The tank had no apparent holes, leaks, or broken seams. The piping was not rusty and no holes or cracks were found. The tank was cut in half and transported and disposed of at Levin Metals. The associated piping was cut and grouted at the pump house. Removed portions of the piping were disposed of at Levin Metals. Two soil samples (LVF-E2-T4-S-1 and LVF-E2-T4-S-2) were collected from the sand/native soil interface at the bottom of the vault and analyzed for TPH concentrations. The results from both samples indicated TPH concentrations of less than 5 ppm. Copies of the analytical reports are included in Appendix E. The excavated sand was used in the backfilling of the vault.

SUMP

A concrete sump was located near the excavation for Tanks T-1 and T-2. The sump was approximately 30 x 30 x 36-inches deep. The liquid in the sump was collected and disposed of by H&H Ship Service along with the contents of Tank T-3. The sludge in the bottom of the sump was hauled to Casmalia Resources in Santa Barbara, California, with the contaminated soil excavated during the removal of Tank T-2. The sump was steam cleaned and rinsed before breaking a hole in the bottom concrete slab. At the request of the Alameda County Environmental Health Department, a soil sample was collected from under the sump and analyzed for TPH concentrations and heavy metals. The sample results indicated that nondetectable levels of TPH and heavy metal concentrations were below the TLC levels in the California Administrative Code Title 22. The sump was backfilled with sand and capped with concrete.

CONTAMINATED SOIL EXCAVATION AND DISPOSAL

The soil excavated during the removal of Tanks T-1 and T-2 was stockpiled and sampled. The samples were analyzed for TPH. The results indicated TPH levels exceeding 1,000 ppm. Therefore, the stockpiled soil was transported and disposed of at Casmalia Waste Disposal Site. An additional 18 cubic yards were excavated on January 12, 1988, and January 20, 1988, for remediation purposes. Two additional soil samples were collected after the remedial soil excavation on January 12, 1988. One of the samples had TPH concentrations of 96 ppm, and the other had TPH concentrations of 1,600 ppm. An additional volume of material was excavated on January 20, 1988, in an effort to remove the soil with TPH concentrations greater than 1,000 ppm. A soil sample was collected at this time. The results indicated that TPH concentrations had been reduced to less than 5 ppm. At this time, the excavation was backfilled.

BACKFILL, COMPACTION, AND RESURFACING

The excavation for Tanks T-1, T-2, and T-3 was backfilled with imported clean crushed rock, sand, and base rock. The non-contaminated excavated material was also used in backfilling the excavation. The excavation was resurfaced with portland cement concrete pavement to match the surrounding area.

The tank vault for Tank T-4 was backfilled with the excavated material and topped off with imported sand and base rock. Longview Fibre completed the resurfacing by framing an extension at the end of the vault prior to pouring the concrete. Longview Fibre installed a propane tank on the new concrete slab to provide fuel for the fire protection water pump.

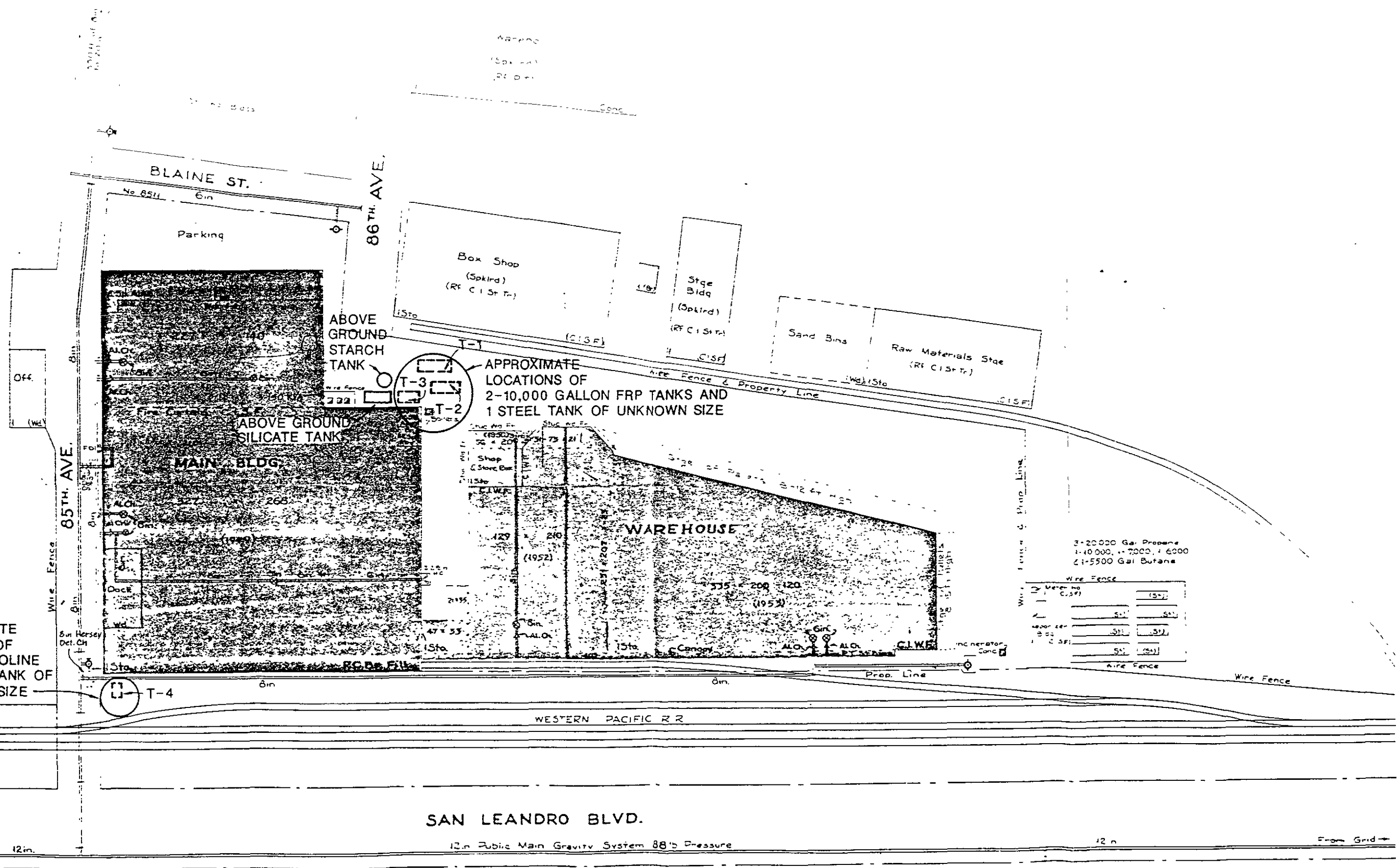
The sump was backfilled with imported sand and base rock prior to capping with concrete.

RECOMMENDATIONS

FURTHER INVESTIGATION

In compliance with RWQCB Guidelines for Addressing Fuel Leaks, CH2M HILL recommends the installation of a groundwater monitoring well downgradient of the tank removal excavation for Tanks T-1, 2, and 3. The monitoring well should be sampled quarterly and analyzed for purgeable organics (benzene, toluene, and xylene) using an EPA method 602 analytical procedure. During installation of the well, soil samples should be collected and analyzed for TPH, diesel.

SFR59/d.1



APPROXIMATE LOCATION OF STEEL GASOLINE STORAGE TANK OF UNKNOWN SIZE

APPROXIMATE LOCATIONS OF 2-10,000 GALLON FRP TANKS AND 1 STEEL TANK OF UNKNOWN SIZE

3-20000 Gal Propane	
1-40000, 1-7000, 1-6000	
2-5500 Gal Butane	
Wire Fence	
Wire	(5%)
...	...
...	...
...	...
...	...
...	...

Visitant Land for 600 ft. then Lumber Site Beyond.

LONGVIEW FIBRE COMPANY
OAKLAND, CALIFORNIA

CONTRACT DOCUMENTS FOR
UNDERGROUND TANK REMOVAL
AND DISPOSAL

CH2M HILL
Emeryville, California
December 1987

Copyright 1987 CH2M HILL

Project No. F24103.A0

Copy No. _____

00060
CONTENTS

Invitation To Bid

Summary of Work

Instructions to Bidders

Proposal

Supplementary Conditions

Specifications

Section 01001 General Requirements
Section 02015 Move In and Site Preparation
Section 02102 Clearing
Section 02222 Tank Removal and Disposal

Attachments

Site Plan

* * * * *

00800
INVITATION TO BID

1. SCOPE

Proposals for Tank Removal Services at the Longview Fibre Company in Oakland, California, will be received at the offices of CH2M HILL, 6425 Christie Avenue, Suite 500, Emeryville, CA 94608 until 5:00 p.m. on December 15, 1987. Please submit three copies of your bid including any amendments. Any bids received after the time and date specified will not be considered.

The project contemplated consists of the removal and disposal of two 10,000 gallon underground storage tanks and the location verification, removal and disposal of two underground storage tanks of unknown size. The two 10,000 gallon tanks shall be excavated, removed and disposed of during the facility's off-hours between the dates of December 21, 1987 and January 1, 1988. If the excavation cannot be immediately backfilled and the concrete re-established within this time schedule, as determined by the Owner or the Owner's representative, the excavation shall be suitably shored or partially backfilled to avoid sloughing the walls or collapse of the excavated walls during plant operation. It is the intent of this contract that tank cleaning and disposal shall be performed by H & H Ship Service, P.O. Box 77363, San Francisco, California 94107, (415) 543-4835. The scope of the project is discussed in more detail in the Summary of Work.

Each Bid must be submitted on the prescribed forms.

All insurance contracts and certificates of insurance shall be either executed by or countersigned by a licensed resident agent of the insurance company having his place of business in the State of California and in all ways complying with the insurance laws of the State of California. Further, the said insurance company shall be duly licensed and qualified to do business in the State of California.

Before a Contract will be awarded for the work contemplated herein, the Owner will conduct such investigation as is necessary to determine the performance record and ability of the apparent low Bidder to perform the size and type of work specified under this Contract. Upon request, the Bidder shall submit such information as deemed necessary by the Owner to evaluate the Bidder's qualifications.

For information concerning the proposed work, or for an appointment to visit the site of the proposed work, contact Deanne Fischer or David Snyder, CH2M HILL, 415/652-2426.

The right is reserved to reject all Bids or any Bid not conforming to the intent and purpose of the Contract Documents, and to postpone the award of the Contract for a period of time which, however, shall not extend beyond 60 days from the bid opening date.

* * * * *

01010
SUMMARY OF WORK

1. SCOPE

1.1 WORK INCLUDED: This section describes the project in general, and provides an overview of the extent of the work to be performed under this Contract. Detailed requirements and extent of work is stated in the applicable Specification sections. The Contractor shall, except as otherwise specifically stated herein or in any applicable parts of the Contract Documents, provide and pay for all labor, materials, equipment, tools, construction equipment, and other facilities and services necessary for proper execution, testing, and completion of the work under this Contract.

2. CONTRACT DOCUMENTS

2.1 The Contract Documents include the Invitation to Bid, Summary of Work, Instructions to Bidders, Proposal, Supplementary Conditions, Specifications, Drawings, Addenda, and all requirements and provisions incorporated therein by specific reference thereto. They are intended to be self-explanatory and cooperative, and to describe and provide for a complete work. Bidders are required to familiarize themselves with the provisions of the Contract Documents and make available to prospective suppliers and subcontractors such information derived therefrom that applies to suppliers and subcontractors.

3. SPECIFICATIONS

3.1 The Specifications included in these Contract Documents establish the performance and quality requirements for materials and equipment and the minimum standards for the quality of workmanship and appearance. Generally, there has been no attempt to separate the Specification sections into groups for the work of separate subcontractors, or for work to be performed by the various trades. Should there be any question as to the interpretation of any particular Specification section or part of a Specification section, such question should be directed to the Engineer prior to the submittal of a proposal for the work under this Contract.

4. REASONABLY IMPLIED PARTS OF THE WORK SHALL BE DONE THOUGH
ABSENT FROM SPECIFICATIONS

4.1 Any part of the work which is not mentioned in the Specifications but is shown on the Drawings, or any part not shown on the Drawings but described in the Specifications, or any part not shown on the Drawings nor described in the Specifications, but which is necessary or normally required as a part of such work, or is necessary or required to make each installation satisfactorily and legally operable, shall be performed by the Contractor as incidental

work without extra cost to the Owner, as if fully described in the Specifications and shown on the Drawings, and the expense thereof shall be included in the applicable unit prices or lump sum bid for the work.

5. DESCRIPTION OF WORK

5.1 GENERAL: The work to be performed by the Bidder includes the removal and disposal of two 10,000 gallon underground storage tanks (T-1 and T-2); verifying the exact location of, removal and disposal of two underground tanks (T-3 and T-4) of unknown size; and other work required to be performed as described elsewhere in the Contract Documents. The tanks are located at the Longview Fibre Company facility on Blaine Street in Oakland, California.

5.2 REMOVAL AND DISPOSAL OF TWO 10,000 GALLON TANKS: Technical specifications for tank removal and disposal are included in Section 02222 of this document. The two 10,000 gallon tanks to be removed and disposed of are constructed of fiberglass and previously stored diesel fuel. The tanks are located in a courtyard located near the only access to the facility. To cause the least amount of disturbance to facility operations, construction work involved in the removal of these two tanks shall be completed during facility off-hours. Longview Fibre Company's operating hours are 6:00 a.m. to 5:00 p.m. daily. The facility will not be operating on December 24, 25, and 31, 1987 or January 1, 1988. The facility does not operate on the weekends. If the excavation cannot be backfilled immediately as determined by the Owner or Owner's representative, measures shall be taken to stabilize the excavation to withstand semi-truck traffic nearby during daytime facility operation hours. The excavation shall be partially backfilled to prevent sloughing or caving in of the excavation walls. After final backfilling is completed, Contractor shall restore the concrete paving to match the surrounding area as specified.

5.3 TANK LOCATION VERIFICATION, REMOVAL AND DISPOSAL: Technical specifications for tank location verification, removal and disposal are included in Section 02222 of this document. The two underground tanks that require location verification include a steel tank (Tank T-3) of unknown size located in the same courtyard as Tanks T-1 and T-2, and a steel tank (Tank T-4) of unknown size located on the other side of the facility as shown on the site plan.

Tank T-3 previously stored diesel fuel. It is located in close proximity to the facility warehouse and two aboveground tanks. The Contractor shall determine the exact location of Tank T-3 and shall submit location drawings to the Owner's representative. The Owner's representative will then decide whether to remove the tank or abandon in place. If tank removal is decided, the Contractor shall utilize the location verification information to determine the protection method necessary to remove the tank in a manner that will avoid settlement of or damage to the warehouse or the aboveground

tanks. After final backfilling is completed, Contractor shall restore the concrete paving to match the surrounding area as specified.

Tank T-4 stores gasoline fuel for the emergency fire protection water pump. It is located within close proximity of the plant warehouse and the fire protection pump house. The Contractor shall determine the exact location of Tank T-4 and shall submit location drawings to the Owner's representative. The Owner's representative will then decide whether to remove the tank or abandon in place. If tank removal is decided, the Contractor shall utilize the location verification information to determine the protection method necessary to remove the tank in a manner that will avoid settlement of or damage to the warehouse or the pumphouse. The Contractor shall determine the method of protecting the warehouse and the pumphouse. The surface over Tank T-4 shall be restored to conform to the surrounding area.

A site plan of the facility is attached. The approximate tank locations are indicated on the site plan. Locations and orientation of all four tanks shall be verified by the Contractor prior to excavation. Contractor shall be responsible for locating and verifying onsite utilities within the construction area.

All tank removal and disposal activities shall be in accordance with applicable local, State, and Federal regulations.

Bidder shall subcontract with H & H Ship Service for disposal of tank and tank contents and cleaning of tank offsite. The Contractor shall contact Alameda County Division of Hazardous Material and the Oakland Fire Marshal's office 24 hours prior to tank removal.

Bidder shall dispose of the tanks at a State-approved tank dismantling yard within the time period specified on the permits. All excavated soil deemed to be potentially contaminated by the Alameda County Environmental Health Department and/or the Owner shall be placed in a lined, covered roll-off container to be provided by the Bidder. The Bidder shall provide the Owner and the Alameda County Environmental Health Department with a receipt for delivery of each tank to H & H Ship Service within the time period specified on the permits.

All excavated soil deemed to be potentially contaminated by the Alameda County Environmental Health Department and/or the Owner shall be placed in a lined, covered roll-off container to be provided by the Bidder.

All contaminated material shall be disposed of in accordance with local, state, and federal regulations.

* * * * *

INSTRUCTIONS TO BIDDERS

1. CONTRACT DOCUMENTS

A. FORMAT

The Contract Documents are divided into parts, divisions, and sections for convenient organization and reference. Generally, there has been no attempt to divide the Specification sections into work performed by the various building trades, work by separate subcontractors, or work required for separate facilities in the project.

B. DOCUMENT INTERPRETATION

The separate sections contained within these Contract Documents are intended to be mutually cooperative and to provide all details reasonably required for the execution of the proposed work.

Should there be any doubt as to the meaning or intent of said Contract Documents, the Bidder should request of the Owner's Representative in writing (at least 3 working days prior to bid opening) an interpretation thereof. Any interpretation or change in said Contract Documents will be made only in writing, in the form of Addenda to the Documents which will be furnished to all registered holders of Contract Documents. Bidders shall submit with their Proposals, or indicate receipt of, all Addenda. The Owner will not be responsible for any other explanation or interpretations of said Documents.

2. TYPE OF PROPOSAL

A. LUMP SUM

A lump sum price shall be submitted for all work set forth in the Proposal with the exception of those items for which payment will be made on the basis of unit prices, as described below. All items required to complete the work specified but not included in the Proposal shall be considered incidental to those set forth in the Proposal.

B. UNIT PRICE

Unit prices shall be submitted for all unit price items of work set forth in the Proposal. The estimate of quantities of work to be done is tabulated in the Proposal and, although stated with as much accuracy as possible, is approximate only and is assumed solely for the basis of

calculation upon which the award of Contract shall be made. Payment to the Contractor will be made on the measurement of the work actually performed by the Contractor on each project as specified in the Contract Documents.

3. PREPARATION OF PROPOSALS

- A. All blank spaces in the Proposal form must be filled in, as required, preferably in BLACK ink. All price information shall be shown in both words and figures where required. No changes shall be made in the phraseology of the forms. Written amounts shall govern in case of discrepancy between the amounts stated in writing and the amounts stated in figures. In case of discrepancy between unit prices and extended totals, unit prices shall prevail.

Any Proposal shall be deemed informal which contains omissions, erasures, alterations, or additions of any kind, or prices uncalled for, or in which any of the prices are obviously unbalanced, or which in any manner shall fail to conform to the conditions set forth in these bidding requirements.

Only one Proposal from any individual, firm, partnership, or corporation, under the same or different names, will be considered. Should it appear to the Owner that any Bidder is interested in more than one Proposal for work contemplated, all Proposals in which such Bidder is interested will be rejected.

B. SIGNATURE

The Bidder shall sign his Proposal in the blank space provided therefor. If Bidder is a corporation, the legal name of the corporation shall be set forth above, together with the signature of the officer or officers authorized to sign Contracts on behalf of the corporation. If Bidder is a partnership, the true name of the firm shall be set forth above, together with the signature of the partner or partners authorized to sign Contracts in behalf of the partnership. If signature is by an agent, other than an officer of a corporation or a member of a partnership, a notarized power-of-attorney must be on file with the Owner prior to opening of Proposals or submitted with the Proposal, otherwise the Proposal will be regarded as not properly authorized.

4. SUBMISSION OF PROPOSALS

All Proposals must be submitted not later than the time prescribed, at the place, and in the manner set forth in the

Invitation to Bid. Proposals must be made on the Proposal forms provided herewith and submitted intact with the volume containing the Bidding Requirements, Contract Forms, and Conditions of the Contract.

5. MODIFICATION OR WITHDRAWAL OF PROPOSALS

Prior to the time and date designated for receipt of Proposals, any Proposal submitted may be modified or withdrawn by notice to the party receiving Proposals at the place designated for receipt of Proposals. Such notice shall be in writing over the signature of the Bidder or by telegram. If by telegram, written confirmation over the signature of the Bidder shall be mailed and postmarked on or before the date and time set for receipt of Proposals, and it shall be so worded as not to reveal the amount of the original Proposal. No Proposal may be withdrawn after the time scheduled for opening of Proposals, unless the time specified in Paragraph AWARD OF CONTRACT of these Instructions to Bidders shall have elapsed.

6. AWARD OF CONTRACT

Within 2 calendar days after the opening of Proposals, the Owner will accept one of the Proposals or will act in accordance with the following paragraphs. The acceptance of the Proposal will be by written notice of award, mailed to the office designated in the Proposal, or delivered to the Bidder's representative. In the event of failure of the lowest responsive, responsible Bidder to sign the Contract and provide an acceptable insurance certificate(s) and evidence of holding required licenses and certificates, the Owner may award the Contract to the next lowest responsive, responsible Bidder. Such award, if made, will be made within 20 days after the opening of Proposals.

The Owner reserves the right to accept or reject any or all Proposals, and to waive any informalities and irregularities in said Proposals.

7. BASIS OF AWARD

The award will be made by the Owner on the basis of that Proposal which, in the Owner's sole and absolute judgment, will best serve the interest of the Owner.

The Owner may reject all Proposals or take such other action as best serves the Owner's interests.

8. EXECUTION OF CONTRACT

The successful Bidder shall, within 2 working days after receiving notice of award, sign and deliver to the Owner a Contract to be sent to the Bidder at the time of award, together with the insurance certificate as required in the Contract Documents and evidence of holding required licenses and certificates. Within 2 working days after receiving the signed Contract from the successful Bidder, the Owner's authorized agent will sign the Contract and issue the Notice to Proceed. Signature by both parties constitutes execution of the Contract.

9. TIME OF COMPLETION

All work to be performed by the Contractor under this contract shall be completed within 60 working days after Notice to Proceed.

The time of completion of the work to be performed under this Contract is the essence of the Contract.

* * * * *

NOTE TO BIDDER: Use preferably BLACK ink for completing this Proposal form.

PROPOSAL

To: Worth Cornelius

Address: Longview Fibre Company
8511 Blaine Street
Oakland, CA 94621

Project Title: Underground Tank Removal and Disposal

Bidder's person to contact for additional information on this Proposal:

Name: _____

Telephone: _____

BIDDER'S DECLARATION AND UNDERSTANDING

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Proposal are those named herein, that this Proposal is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Proposal is made without any connection or collusion with any person submitting another Proposal on this Contract.

The Bidder further acknowledges that he has satisfied himself as to the nature and location of the work, the general and local conditions, particularly those bearing upon availability of transportation, access to the site, disposal, handling and storage of materials, availability of labor, water, electric power, roads, and uncertainties of weather, river stages, or similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment and facilities needed preliminary to and during the prosecution of the work and all other matters which can in any way affect the work or the cost thereof under this Contract.

The Bidder further acknowledges that he has satisfied himself as to the character, quality, and quantity of surface and subsurface materials to be encountered from his inspection of the site and from reviewing any available records of exploratory work furnished by the Owner or included in these Documents. Failure by the Contractor to acquaint himself with the physical conditions of the site and all the available information will not relieve him from responsibility for properly estimating the difficulty or cost of successfully performing the work.

The Bidder warrants that as a result of his examination and investigation of all the aforesaid data that he can perform the work in a good and workmanlike manner and to the satisfaction of the Owner. The Owner assumes no responsibility for any representations made by any of its officers or agents during or prior to the execution of this Contract, unless (1) such representations are expressly stated in the Contract, and (2) the Contract expressly provides that the responsibility therefor is assumed by the Owner.

The Bidder further declares that he has carefully examined the Contract Documents for the construction of the project, that he has personally inspected the site, that he has satisfied himself as to the quantities involved, including materials and equipment, and conditions of work involved, including the fact that the description of the quantities of work and materials, as included herein, is brief and is intended only to indicate the general nature of the work and to identify the said quantities with the detailed requirements of the Contract Documents, and that this Proposal is made according to the provisions and under the terms of the Contract Documents, which Documents are hereby made a part of this Proposal.

CONTRACT EXECUTION AND INSURANCE

The Bidder agrees that if this Proposal is accepted, he will, within 2 working days after receiving notice of award, sign the Contract in the form annexed hereto, and will at that time, deliver to the Owner the Insurance Certificate required herein, and will, to the extent of his bid, furnish all machinery, tools, apparatus, and other means of construction and do the work and furnish all the materials necessary to complete all work as specified or indicated in the Contract Documents.

CERTIFICATES OF INSURANCE

Bidder agrees to furnish the Owner, before commencing the work under this Contract, the certificates of insurance as specified in these Documents.

Bidder further agrees that the lump sum amount stated herein includes specific consideration for the insurance coverages, including contractual liability, specified in the Contract Documents.

START OF CONSTRUCTION AND CONTRACT COMPLETION TIME

The Bidder agrees to complete the construction, in all respects, within 60 working days after the Notice to Proceed, and to meet the intermediate deadlines specified herein. Construction activities associated with the removal of Tanks T-1 and T-2 shall be performed at night between the hours of 5:00 p.m. and 5:30 a.m. on work days or anytime during weekends or holidays between December 21, 1987, and January 1, 1988, including removal, disposal, backfill, and surface restoration to minimize interference with facility operations. Actual removal of the tanks shall not be performed at night or on December 25 or December 31, 1987, in accordance with Alameda County and Oakland Fire Marshal's inspection schedule.

Removal of tank T-3 shall be performed at night between the hours of 5:00 p.m. and 5:30 a.m., or during other times and using such techniques as required to keep all construction activities completely clear of the access driveway.

The schedule for the removal of Tank T-4 is not critical as it is not located within the facility's operating area.

Intermediate deadlines are based upon notice to proceed on or before December 22, 1987.

ADDENDA

The Bidder hereby acknowledges that he has received Addenda No's.

(Bidder shall insert No. of each Addendum received) and agrees that all addenda issued are hereby made part of the Contract Documents, and the Bidder further agrees that his Proposal(s) includes all impacts resulting from said addenda.

SALES AND USE TAXES

The Bidder agrees that all sales and use taxes are included in the stated bid prices for the work, unless provision is made herein for the Bidder to separately itemize the estimated amount of sales tax.

LUMP SUM BID

The Bidder agrees to accept as full payment for the lump sum work proposed under this project, as herein specified and as shown on the Drawings, based upon the undersigned's own estimate of quantities and costs, the following lump sum of:

_____ Dollars
 and _____ Cents \$ _____
 (Amount written in words has precedence)

Sales Tax \$ _____

BIDDER BREAKDOWN OF LUMP SUM BID

For the sole purpose of facilitating monthly progress payments, the following breakdown of the total lump sum bid is to be given with the Bid. The price breakdown shall be fairly apportioned to the various parts of the work and shall meet with the Engineer's approval. If so requested by the Engineer, the Contractor shall substantiate any price or prices with additional detail price breakdown. In the event of discrepancy between the written lump sum stated in LUMP SUM BID and the arithmetic total of the following BIDDER BREAKDOWN, the lump sum stated in writing shall have precedence.

(The Bidder must submit with this Proposal apportioned amounts for the items listed below.)

<u>Item</u>	<u>Section No.</u>	<u>Description</u>	<u>Lump Sum (Words)</u>	<u>Amount</u>
1.		Insurance	_____	\$ _____
2.	02015	Move In & Site Preparation	_____	\$ _____
3.	02102	Clearing	_____	\$ _____
4.	02222	Tank Removal and Disposal	_____	\$ _____
TOTAL LUMP SUM (ITEMS 1-5)			_____	\$ _____

UNIT PRICE ITEMS

The Bidder further proposes to accept as full payment for the work proposed herein the amounts computed under the provisions of the Contract Documents and based on the following unit price amounts, it being expressly understood that the unit prices are independent of the exact quantities involved. The Bidder agrees that the unit prices represent a true measure of the labor and materials required to perform the work, including all allowances for overhead and profit for each type and unit of work called for in these Contract Documents. The unit price shall be valid for the quantity stated in the Proposal +/-100 percent. The amounts shall be shown in both words and figures. In case of a discrepancy, the amount shown in words shall govern.

<u>Item</u>	<u>Quan.</u>	<u>Unit</u>	<u>UP (Fig)</u>	<u>Unit Price (Words)</u>	<u>Ext.Total Amt.</u>
-------------	--------------	-------------	-----------------	---------------------------	-----------------------

02222, TANK REMOVAL AND DISPOSAL

5.	Removal and Disposal of Tank Contents (Tanks T-1, 2, 3, and 4)				
		TOTAL			
	3,050	GALS	\$ _____	_____	\$ _____
6.	Disposal of Water from Tank Cleaning (Tank T-3)				
	55	GALS	\$ _____	_____	\$ _____
7.	Disposal of Contaminated Groundwater or Rainwater Entering Excavation (Tank T-3)				
	250	GAL	\$ _____	_____	\$ _____
8.	Excavation and Disposal of Contaminated Excavated Materials Excluding Tank (Tank T-3)				
	10	CY	\$ _____	_____	\$ _____
9.	Determining Location of Tank T-3				
	1 tank	LS	\$ _____	_____	\$ _____
10.	Preparation of Proposed Protection Plan (Tank T-3)				
	1 plan	LS	\$ _____	_____	\$ _____
11.	Provide Protection of Structures near Tank T-3				
	1 tank	LS	\$ _____	_____	\$ _____

<u>Item</u>	<u>Quan.</u>	<u>Unit</u>	<u>UP (Fig)</u>	<u>Unit Price (Words)</u>	<u>Ext.Total Amt.</u>
12. Excavation and Disposal of Non-Contaminated Materials for Tank Removal (Tank T-3)	115	CY	\$ _____	_____	\$ _____
13. Sawcut, Removal and Disposal of Existing Concrete (Tank T-3)	9	CY	\$ _____	_____	\$ _____
14. Furnish, Place and Compact Sand Backfill (Tank T-3)	130	CY	\$ _____	_____	\$ _____
15. Surface Restoration (Portland Cement, Concrete Pavement, including reinforcement and base materials) (Tank T-3)	40	SY	\$ _____	_____	\$ _____
16. Disposal of Water from Tank Cleaning (Tank T-4)	55	GALS	\$ _____	_____	\$ _____
17. Disposal of Contaminated Groundwater or Rainwater Entering Excavation (Tank T-4)	100	GAL	\$ _____	_____	\$ _____
18. Excavation and Disposal of Contaminated Excavated Materials Excluding Tank (Tank T-4)	10	CY	\$ _____	_____	\$ _____
19. Determining Location of Tank T-4	1 tank	LS	\$ _____	_____	\$ _____
20. Excavation and Disposal of Non-Contaminated Materials for Tank Removal (Tank T-4)	6	CY	\$ _____	_____	\$ _____
21. Sawcut, Removal and Disposal of Existing Concrete (Tank T-4)	1	CY	\$ _____	_____	\$ _____

<u>Item</u>	<u>Quan.</u>	<u>Unit</u>	<u>UP (Fig)</u>	<u>Unit Price (Words)</u>	<u>Ext.Total Amt.</u>
22.	Furnish, Place and Compact Sand Backfill (Tank T-4)				
	9	CY	\$ _____	_____	\$ _____
23.	Disposal of Water from Tank Cleaning (Tanks T-1 and 2)				
	110	GALS	\$ _____	_____	\$ _____
24.	Disposal of Contaminated Groundwater or Rainwater Entering Excavations (Tanks T-1 and 2)				
	1000	GALS	\$ _____	_____	\$ _____
25.	Excavation and Disposal of Contaminated Excavated Materials Excluding Tanks (Tanks T-1 and 2)				
	20	C.Y.	\$ _____	_____	\$ _____
26.	Excavation and Disposal of Non-Contaminated Materials for Tank Removals (Tanks T-1 and 2)				
	450	C.Y.	\$ _____	_____	\$ _____
27.	Sawcut, Removal and Disposal of Existing Concrete (Tanks T-1 and 2)				
	130	S.Y.	\$ _____	_____	\$ _____
28.	Furnish, Place and Compact Sand Backfill (Tanks T-1 and 2)				
	510	C.Y.	\$ _____	_____	\$ _____
29.	Surface Restoration (Portland Cement, Concrete Pavement including reinforcement and base materials) (Tanks T-1 and T-2)				
	110	S.Y.	\$ _____	_____	\$ _____
TOTAL OF EXTENDED TOTAL AMOUNT FOR UNIT PRICE ITEMS 6-29					\$ _____
TOTAL OF LUMP SUM BID (ITEMS 1-5) PLUS TOTAL OF EXTENDED TOTAL AMOUNT FOR UNIT PRICE ITEMS 6-29					\$ _____

BIDDER

The name of the Bidder submitting this Proposal is _____

_____ doing business at

_____ ' _____ ' _____ Zip
Street City State

which is the address to which all communications concerned with this Proposal and with the Contract shall be sent.

The names of the principal officers of the corporation submitting this Proposal, or of the partnership, or of all persons interested in this Proposal as principals are as follows:

If Sole Proprietor or Partnership

IN WITNESS hereto the undersigned has set his (its) hand this _____

day of _____, 19__.

Signature of Bidder

Title

If Corporation

IN WITNESS WHEREOF the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly

authorized officers this _____ day of _____, 19__.

(SEAL)

Name of Corporation

By _____

Title _____

Attest _____
Secretary

* * * * *

SUPPLEMENTARY CONDITIONS

SC-1. ABBREVIATIONS AND DEFINITIONS

1.1 ABBREVIATIONS: Wherever in the Contract Documents the following abbreviations, words, and terms or pronouns in place of them are used, the meaning will be construed as follows:

AASHTO	American Association of State Highway and Transportation Officials
ANSI	American National Standards Institute
ASCE	American Society of Civil Engineers
ASTM	American Society for Testing and Materials
FHWA	Federal Highway Administration
NBFU	National Board of Fire Underwriters
NEC	National Electrical Code
OSHA	Occupational Safety and Health Act (both Federal & State)
UBC	Uniform Building Code
UL	Underwriters' Laboratories, Inc.

1.2 DEFINITIONS: Wherever in the Contract Documents the following terms are used, the intent and meaning shall be interpreted as follows:

1.2.1 As Approved: The words "as approved", unless otherwise qualified, shall be understood to be followed by the words "by the Owner for conformance with the intent of the Contract Documents".

1.2.2 As Shown, and As Indicated: The words "as shown" and "as indicated" shall be understood to be followed by the words "in the Contract Documents".

1.2.3 Bidder: The person or persons, partnership, firm, or corporation submitting a Proposal for the Work contemplated.

1.2.4 Contract Documents: The "Contract Documents" consist of the Purchase Order, Invitation to Bid, Summary of Work, Instructions to Bidders, Proposal, Supplementary Conditions, Specifications, all modifications thereof incorporated into the Documents, and including all other requirements incorporated by specific reference. These form the Contract.

1.2.5 Contractor: The person or persons, partnership, firm, or corporation who enters into the Contract awarded it by the Owner.

1.2.6 Contract Completion: The "Contract Completion" is the date the Owner accepts the entire Work as being in compliance with the intent of the Contract Documents, or formally waives nonconforming Work to the extent of nonconformity, and issues the final payment.

1.2.7 Days: Unless otherwise specifically stated, the term "days" will be understood to mean calendar days. Business day, working day, or workday means any day other than Saturday, Sunday, or legal holiday.

1.2.8 Engineer: Owner's Representative.

1.2.9 General Conditions: Supplementary Conditions.

1.2.10 Notice: The term "notice" or the requirement to notify, as used in the Contract Documents or applicable state or federal statutes, shall signify a written communication delivered in person or by registered mail to the individual, or to a member of the firm, or to an officer of the corporation for whom it is intended. Registered mail shall be addressed to the last business address known to the party giving the notice.

1.2.11 Notice to Proceed: A written notice given by the Owner to the Contractor fixing the date on which the Contract time will commence to run and on which the Contractor shall start to perform its obligations under the Contract Documents.

1.2.12 Or Equal: The term "or equal" shall be understood to indicate that the "equal" product is the same or better in function, performance, reliability, quality, and general configuration than the named product.

1.2.13 Owner: The Owner for this project shall be Longview Fibre Company, 8511 Blaine Street, Oakland, CA 94621.

1.2.14 Owner's Representative: The Owner's Representative on this project is CH2M HILL, INC., which is authorized by the Owner to act on his behalf.

1.2.15 Contacts For This Project:

Owner: Carl Burch/Longview Fibre
(415) 569-2616 (work)
(209) 239-8966 (home)

Owner's Representative: Deanne Fischer/CH2M HILL
(415) 652-2426 (work)
(415) 530-6640 (home)

1.2.16 Purchase Order: The written agreement between the Owner and the Contractor, setting forth the obligations of the parties thereunder, including, but not limited to, the performance of the Work; the furnishing of labor, materials, or other services; and the basis of payment. The Contract Documents are hereby referred to and by reference made a part of the Purchase Order as fully and completely as if the same were fully set forth therein and are mutually cooperative therewith.

1.2.17 Site: The term "site" shall be understood to mean the land, property, or interest therein owned by the Owner and generally known as Longview Fibre Company, Oakland, California.

1.2.18 Specifications: The term "Specifications" refers to those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto. Where standard specifications, such as those of ASTM, AASHTO, etc., have been referred to, the applicable portions of such standard specifications shall become a part of these Contract Documents. If referenced specifications conflict with specifications contained herein, the requirements contained herein shall prevail.

1.2.19 Unit Price: An amount stated in the Contract as the price for a particular unit of the Work, measured as described within the Contract Documents.

1.2.20 Work: The word "Work" within these Contract Documents shall include all material, labor, tools, and all appliances, machinery, transportation, and appurtenances necessary to perform and complete the project as described in the Contract Documents, and such additional items not specifically indicated or described which can be reasonably inferred as belonging to the item described or indicated and as required by good practice to provide a complete and satisfactory system or structure. As used herein, "provide" shall be understood to mean "furnish and install, complete in-place".

SC-2. EXAMINATION AND VERIFICATION OF CONTRACT DOCUMENTS

The Contractor shall thoroughly examine and become familiar with all of the various parts of these Contract Documents and determine the nature and location of the Work, the general and local conditions, and all other matters which can in any way affect the Work under the Contract Documents. Failure to make an examination necessary for this determination shall not release the Contractor from the obligations of this Contract. No oral agreement or conversation with any officer, agent, or employee of the Owner, or with the Owner's Representative either before or after the execution of this Contract, shall affect or modify any of the terms or obligations herein contained.

SC-3. AUTHORITY OF THE OWNER'S REPRESENTATIVE

The authority and responsibility of the Owner's Representative shall be limited to the observation of the Work, evaluation of its conformance with the intent of the Contract Documents, and documentation of the Work for the Owner. Neither the Owner's Representative's authority to act under this provision, nor any decision made by it in good faith either to exercise or not to exercise such authority, shall give rise to the assumption of any

duty or responsibility of the Contractor, any subcontractor, their respective Sureties, any of their agents or employees, or any other person performing any of the Work.

SC-4. DUTIES AND RESPONSIBILITIES OF THE OWNER'S REPRESENTATIVE

The Owner's Representative may be onsite during the various stages of construction to observe the progress and quality of the Work and to determine, in general, if the Work is proceeding in accordance with the intent of the Contract Documents. The Owner's Representative may not make comprehensive or continuous review or observation to check quality of the Work, but will provide assistance to the Owner in verifying quantities of Work.

One or more persons may be assigned to observe the Work on behalf of the Owner's Representative. The Contractor shall furnish all reasonable assistance required by the Owner's Representative for proper observation of the Work.

The above-mentioned duties and responsibilities of the Owner's Representative shall not relieve the Contractor of its obligations to conduct comprehensive inspections of the Work, to furnish materials, to perform acceptable Work, and to provide adequate safety precautions, in conformance with the intent of the Contract Documents.

SC-5. LIMITATIONS ON THE OWNER'S REPRESENTATIVE'S RESPONSIBILITIES

The Owner's Representative and the Owner will not be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, and Owner's Representative will not be responsible for Contractor's failure to perform or furnish the Work in accordance with the Contract Documents.

The Owner's Representative and the Owner will not be responsible for the acts or omissions of Contractor or of any subcontractor, any supplier, or of any other person or organization performing or furnishing any of the Work.

Whenever in the Contract Documents the terms "as ordered", "as directed", "as required", "as allowed", "as approved", or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper", or "satisfactory", or adjectives of like effect or import are used to describe a requirement, direction, review or judgment of the Owner's Representative as to the Work, it is intended that such requirement, direction, review, or judgment will be solely to evaluate the Work for compliance with the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to the Owner's Representative any duty or

authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of this Article.

SC-6. REJECTED WORK

Any defective Work or nonconforming materials or equipment that may be discovered at any time prior to expiration of the warranty period, shall be removed and replaced by Work which shall conform to the provisions of the Contract Documents. Any material condemned or rejected shall be removed at once from the project site. Failure on the part of the Owner to condemn or reject bad or inferior Work or to note nonconforming materials or equipment on Contractor submittals shall not be construed to imply acceptance of such Work. It is also understood by the Contractor that payment for the services and materials provided under the Contract Documents shall not constitute acceptance.

SC-7. ACCESS TO DISPOSAL SITES

The parties understand that the Contractor is solely responsible for obtaining necessary access to disposal sites for the purposes set forth in the Contract and in the Contract Documents. The Owner has no responsibility or liability to the Contractor or any of its subcontractors for disposal site access or any delays associated therewith. The Contractor's Work onsite will not be allowed to commence until access to a disposal site has been obtained.

SC-8. CONTRACTOR, AN INDEPENDENT AGENT

The Contractor shall independently perform all Work under this Contract and shall not be considered as an agent of the Owner, nor shall the Contractor's subcontractors or employees be subagents of the Owner.

SC-9. SUBCONTRACTING

The Contractor shall submit to the Owner the names of all subcontractors proposed for the Work. The Contractor shall not employ any subcontractors that the Owner objects to as lacking capability to properly perform Work of the type and scope anticipated. No changes will be allowed from the submitted Subcontractor List without approval of the Owner.

The Contractor is as fully responsible to the Owner for the acts and omissions of its subcontractors and of persons either directly or indirectly employed by them as it is for the acts and omissions of persons directly employed by it.

Nothing contained in the Contract Documents shall create any contractual relationship between any subcontractor and the Owner.

The Contractor shall certify that all subcontractor employees working at or near the site meet the conditions of medical fitness, training, and experience required by these Contract Documents of the Contractor personnel.

SC-10. INSURANCE AND LIABILITY

A. GENERAL:

The following types and limits of insurance will be provided by the CONTRACTOR:

(a) Workmen's Compensation:

Statutory

(b) Comprehensive General Liability

Including:

- (1) Products/Completed Operations Hazard) Bodily Injury: \$1,000,000 each occurrence
- (2) Contractual Insurance) Property Damage: \$1,000,000 each occurrence
- (3) Broad Form Property Damage)
- (4) Independent Contractors)
- (5) Personal Injury)

(c) Comprehensive Auto Liability

Including:

- (1) Owned) Bodily Injury and Property Damage Combined: \$1,000,000 each occurrence
- (2) Non-Owned)
- (3) Hired)

(d) Excess Liability insurance coverage in the amount of: \$1,000,000.

(e) (1) OWNER will be added as an additional named insured for above liability coverages.

(2) OWNER will be provided Certificates of Insurance with 30-day cancellation notice.

Before commencing work under this Contract, Contractor shall furnish the Owner with certificates of insurance specified herein showing the type, amount, class of operations covered, effective dates, and date of expiration of policies, and containing substantially the following statement:

"The insurance covered by this certificate shall not be cancelled or materially altered, except after 30 days' written notice has been received by the Owner."

In case of the breach of any provision of this Article, the Owner, at his option, may take out and maintain, at the expense of the Contractor, such insurance as the Owner may deem proper and may deduct the cost of such insurance from any monies which may be due or become due the Contractor under this Contract. For insurance furnished under this contract, the Owner's representative shall be added as an additional insured.

B. CONTRACTOR AND SUBCONTRACTOR INSURANCE

The Contractor shall not commence work under this Contract until he has obtained all the insurance required hereunder and such insurance has been reviewed by the Owner, nor shall the Contractor allow any Subcontractor to commence work on his subcontract until insurance specified has been obtained. Review of the insurance by the Owner shall not relieve or decrease the liability of the Contractor hereunder.

C. COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE

The Contractor shall maintain during the life of this Contract the statutory amount of Workers' Compensation Insurance, in addition, Employer's Liability Insurance in an amount as specified in the Supplementary Conditions, for each occurrence, for all of his employees to be engaged in work on the project under this Contract. In case any such work is subcontracted, the Contractor shall require the Subcontractor to provide similar Workers' Compensation and Employer's Liability Insurance for all of the Subcontractor's employees to be engaged in such work.

D. GENERAL LIABILITY INSURANCE (INCLUDING AUTOMOBILE)

The Contractor shall maintain during the life of this Contract such general liability, completed operations and products liability, and automobile liability insurance as will provide coverage for claims for damages for personal injury, including accidental death, as well as for claims for property damage, which may arise directly or indirectly from performance of the work under this Contract. The general liability policy should also specifically ensure the contractual liability assumed by the Contractor under Article INDEMNITY. Coverage for property damage shall be on a "broad form" basis with no exclusions for "X, C & U".

In the event any work under this Contract is performed by a Subcontractor, the Contractor shall be responsible for any liability directly or indirectly arising out of the work performed by the Subcontractor, to the extent such liability is not covered by the Subcontractor's insurance.

The Owner and Owner's Representative, their officers, agents, and employees shall be named as Additional Insureds on the Contractor's and any Subcontractor's general liability and automobile liability insurance policies for any claims arising out of work performed under this Contract.

SC-11. INDEMNITY

To the maximum extent permitted by law, the Contractor shall indemnify and defend the Owner and the Owner's Representative, and their officers, employees, agents, and subconsultants, from all claims and losses, including attorney's fees and litigation costs arising out of property losses or health, safety, personal injury, or death claims by the Contractor, its subcontractors of any tier, and their employees, agents, or invitees regardless of the fault, breach of Contract, or negligence of the Owner or the Owner's Representative, excepting only such claims or losses that have been adjudicated to have been caused solely by the negligence of the Owner or the Owner's Representative and regardless of whether or not the Contractor is or can be named a party in a litigation.

SC-12. EXCLUSION OF CONTRACTOR CLAIMS

In performing its obligations, the Owner's Representative and its consultants may cause expense for the Contractor or its subcontractors and equipment or material suppliers. However, those parties and their sureties shall maintain no direct action against the Owner's Representative, its officers, employees, agents, and consultants for any claim arising out of, in connection with, or resulting from the engineering services performed or required to be performed.

SC-13. CODES, ORDINANCES, PERMITS, AND LICENSES

The Contractor shall keep himself fully informed of all local codes and ordinances, as well as state and federal laws, which in any manner affect the work herein specified. The Contractor shall at all times comply with said codes and ordinances, laws, and regulations, and protect and indemnify the Owner, the Owner's Representative, and their respective employees, and its officers and agents against any claim or liability arising from or based on the violation of any such laws, ordinances, or regulations. All permits, licenses, and inspection fees necessary for prosecution and completion of the work shall be secured and paid for by the Contractor, unless otherwise specified.

SC-14. TAXES AND CHARGES

The Contractor shall withhold and pay any and all sales and use taxes and all withholding taxes, whether state or federal, and pay all Social Security charges and also all State Unemployment Compensation charges, and pay or cause to be withheld, as the case may be, any and all taxes, charges, or fees or sums whatsoever, which are now or may hereafter be required to be paid or withheld under any laws.

SC-15. WORKING FILES

The Contractor shall maintain accurate working files containing all Work documentation including calculations, assumptions, interpretations of regulations, sources of information, and other raw data required in the performance of the Contract Documents. The Contractor shall provide the information contained in its working files to the Owner or Owner's Representative upon request.

SC-16. EMPLOYEES

The Contractor shall employ only competent, skillful, and adequately trained workers to do the Work.

SC-17. HEALTH AND SAFETY

The Contractor shall be solely and completely responsible for conditions of the jobsite, including safety of all persons (including employees) and property during performance of the Work. This requirement shall apply continuously and not be limited to normal working hours. Safety provisions shall conform to U.S. Department of Labor Occupational Safety and Health Act (OSHA), any equivalent state law, and all other applicable federal, state, county, and local laws, ordinances, codes, and regulations. Where any of these are in conflict, the more stringent requirement shall be followed. The Contractor's failure to thoroughly familiarize itself with the aforementioned safety provisions shall not relieve it from compliance with the obligations and penalties set forth therein.

The Contractor shall develop and maintain for the duration of this Contract, a safety program that will effectively incorporate and implement all required safety provisions. The Contractor shall appoint a representative who is qualified and authorized to supervise and enforce compliance with the safety program.

The duty of the Owner or Owner's Representative to observe the progress of the Work does not include review or approval of the adequacy of the Contractor's safety program, safety supervisor, or any safety measures taken in, on, or near the construction site.

The Contractor, as a part of its safety program, shall maintain at its office or other well-known place at the jobsite, safety equipment applicable to the Work as prescribed by the aforementioned authorities, all articles necessary for giving first-aid to the injured, and shall establish the procedure for the immediate removal to a hospital or a doctor's care of persons (including employees) who may be injured on the jobsite.

If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to the Owner. In addition, the Contractor must promptly report in writing to the Owner all accidents whatsoever arising out of, or in connection with, the performance of the Work whether on, or adjacent to, the site, giving full details and statements of witnesses.

SC-18. PROTECTION OF WORK AND PROPERTY

The Contractor shall at all times safely guard and protect from damage the project property, adjacent property, and its own Work from injury or loss in connection with the Contract Documents. All facilities required for protection by federal, state, or municipal laws and regulations and local conditions must be provided and maintained.

The Contractor shall protect its Work and materials from damage due to the nature of the Work, the elements, carelessness of other contractors, or from any cause whatever until the completion and acceptance of the Work. All loss or damages arising out of the nature of the Work to be done under these Contract Documents, or from any unforeseen obstruction or defects which may be encountered in the prosecution of the Work, or from the action of the elements, shall be sustained by the Contractor.

SC-19. RESPONSIBILITY OF CONTRACTOR TO ACT IN EMERGENCY

In case of an emergency which threatens release of toxic or hazardous material, loss or injury of property, and/or safety of life, the Contractor shall act, without previous instructions from the Owner or Owner's Representative, as the situation may warrant. The Contractor shall notify the Owner thereof immediately thereafter.

SC-20. CONTRACTORS' AND MANUFACTURERS' COMPLIANCE WITH STATE SAFETY, OSHA, AND OTHER CODE REQUIREMENTS

The completed Work shall include all necessary permanent safety devices, such as machinery guards and similar ordinary safety items required by the State and Federal (OSHA) industrial authorities and applicable local and national codes. Further, any features of the Work subject to such safety regulations shall be fabricated, furnished, and installed (including Owner-furnished equipment) in compliance with these requirements. Contractors and manufacturers of equipment shall be held responsible for compliance with the requirements included herein. Contractors shall notify all equipment suppliers and subcontractors of the provisions of this Article.

SC-21. SUBSTITUTION OF MATERIALS

Except for Owner-selected equipment items, and items where no substitution is clearly specified, whenever any material, article, device, product, fixture, form, type of construction, or process is indicated or specified by patent or proprietary name, by name of manufacturer, or by catalog number, such specifications shall be deemed to be used for the purpose of establishing a standard of quality and facilitating the description of the material or process desired. This procedure is not to be construed as eliminating from competition other products of equal or better quality by other manufacturers where fully suitable in design, and shall be deemed to be followed by the words "or equal". The Contractor may, in such cases, submit complete data to the Owner for consideration of another material, type, or process which shall be substantially equal in every respect to that so indicated or specified. Substitute materials shall not be used unless approved in writing. The Owner will be the sole judge of the substituted article or material.

SC-22. SCHEDULES AND PROGRESS REPORTS

Prior to starting the construction, the Contractor shall prepare and submit to the Owner, a progress schedule showing approximately the dates on which each part or division of the Work is expected to be started and finished.

SC-23. PROSECUTION OF THE WORK

It is expressly understood and agreed that the time of beginning, rate of progress, and time of completion of the Work are the essence of this Contract. The Work shall be prosecuted at such time, and in or on such part or parts of the project as may be required, to complete the project as contemplated in the Contract Documents and the submitted progress schedule.

If the Contractor desires to carry on Work at night or outside the regular hours, it shall give timely notice to the Owner to allow satisfactory arrangements to be made for observing the Work in progress. The Contractor shall obtain any necessary permits, easements, or licenses required to prosecute the Work under these conditions.

SC-24. PAYMENT FOR CHANGE ORDERS

At the Owner's option, payment or credit for any alterations covered by a Change Order shall be determined by one or a combination of the methods set forth in A, B, or C below, as applicable:

A. UNIT PRICES

Those unit prices stipulated in the Contract shall be utilized where they are applicable. In the event the Change Order results in a change of greater than 100 percent of the original quantity estimated, and the total dollar value of that bid item is significant, the Owner will review the unit price to determine if a new unit price shall be negotiated. Unit prices for new items included in the Change Order shall be negotiated and mutually agreed upon prior to execution of the work.

B. LUMP SUM

A total lump sum for the Work negotiated and mutually acceptable to the Contractor and Owner.

Lump sum quotations for modifications to the Work shall include substantiating documentation with an itemized breakdown of Contractor and subcontractor costs, including labor, material, rentals, approved services, overhead, and profit.

C. COST REIMBURSEMENT WORK

The term "cost reimbursement" shall be understood to mean that payment for the Work will be made on a time and expense basis, that is, on an accounting of the Contractor's forces, materials, equipment, and other items of cost as required and used to do the Work.

The basis for cost reimbursement will be mutually agreed upon by Contractor and Owner prior to commencement of additional work.

The Owner's request for quotations on alterations to the Work shall not be considered authorization to proceed with the Work prior to the issuance of a formal Change Order, nor shall such request justify any delay in existing Work. Quotations for alterations to the Work shall include substantiating documentation with an itemized breakdown of Contractor and subcontractor costs, including labor, material, rentals, approved services, overhead, and profit. The Owner may require detailed cost data in order to substantiate the reasonableness of the proposed costs.

Any compensation paid in conjunction with the terms of a Change Order shall comprise total compensation due the Contractor for the Work or alteration defined in the Change Order. By signing the Change Order, the Contractor acknowledges that the stipulated compensation includes payment for the Work or alteration plus all payment for the interruption of schedules, extended overhead, delay, or any other impact claim or ripple effect, and by such signing specifically waives any reservation or claim for additional compensation in respect to the subject Change Order.

SC-25. FINAL PAYMENT

Upon completion of all of the Work under the Contract Documents, the Contractor shall notify the Owner, in writing, that it has completed its part of the Contract Documents and shall request final payment. Upon receipt of such notice, evidences, releases, and other supporting data required by Owner, the Owner will inspect and make tests as Owner deems necessary. If Owner accepts the completed Work and the final estimate of the amount due the Contractor, upon approval of this final estimate by the Owner, the Owner will pay to the Contractor all monies due it under the provisions of these Contract Documents.

SC-26. CLEANING UP AND DECONTAMINATION

The Contractor shall, at all times, keep property on which Work is in progress and the adjacent property free from accumulations of waste material or rubbish caused by employees or by the Work. The Contractor is responsible for supplying, storing, and disposing of all decontamination supplies and materials. Upon completion of the construction, the Contractor shall remove all temporary structures, rubbish, and waste materials resulting from its operations. The Contractor shall properly decontaminate all personnel, equipment, material or vehicles before any of the aforementioned leave the site, which have been located or working in an area of potential hazardous materials.

SC-27. TERMINATION

A. TERMINATION FOR CONVENIENCE

In addition to the provisions of the clause titled "Cancellation" in the Purchase Order, the Contract Documents or Contractor's Work may be terminated in whole or in part by the Owner for its convenience. In such event, the Contractor will be paid for all Work performed and reasonable expenses properly incurred in connection with the termination.

B. TERMINATION FOR DEFAULT

The Owner may by written notice terminate the whole or any part of the Contract Documents for default in the event that the Contractor fails to perform any of the provisions of the Contract Documents, or fails to make progress as to endanger performance of the Contract Documents in accordance with its terms, and in either of these two circumstances, does not cure such failure to the Owner's reasonable satisfaction within a period of 7 days after receipt of notice from the Owner specifying such failure.

If, after notice of termination of the Contract Documents under the provisions of TERMINATION FOR DEFAULT, it is determined for any reason that the Contractor was not in default or that the default was excusable, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to TERMINATION FOR CONVENIENCE.

C. RIGHTS ARE NOT EXCLUSIVE

The rights and remedies of the Owner provided in this Article TERMINATION shall not be exclusive and are in addition to any other rights and remedies provided by law or equity or under the Contract Documents.

SC-28. USE OF PREMISES

The Contractor shall confine its equipment, the storage of materials, and the operation of its workers to limits shown on the Drawings or indicated by law, ordinances, permits, or directions of the Owner, and shall not unreasonably encumber the premises with its materials or unduly interfere with the Owner's operations on the premises. The Contractor shall provide, at its own expense, the necessary rights-of-way and access to the Work which may be required outside the designated limits for construction and shall furnish the Owner copies of permits and agreements for use of property outside that provided by the Owner.

Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property, utilities, or appurtenances to stresses or pressures that will endanger it.

SC-29. PUBLICITY

No publicity or advertising, including releasing any information to the news media regarding any Work under or relating to the Contract Documents shall be released by the Contractor without the prior approval of the Owner.

* * * * *

01001
GENERAL REQUIREMENTS

1. PROJECT DESCRIPTION

1.1 GENERAL:

1.1.1 A brief description of the work is stated in the Invitation to Bid. To determine the full scope of the project or any particular part of the project, coordinate the applicable information in the several parts of these Contract Documents.

1.1.2 Components of this project include, but are not limited to, location verification, excavation, removal, and disposal of underground storage tanks, tank contents, and associated equipment and debris; backfilling; and site restoration.

1.2 OWNER OPERATIONS: The Contractor shall provide continuous access to the Owner.

2. SEQUENCE OF OPERATIONS

2.1 SCHEDULING:

2.1.1 Plan the work and carry it out with minimum interference to the operation of the existing facilities. Prior to starting the work, confer with the Owner to develop an approved work schedule which will permit the facilities to function normally as practical. It will be necessary to do certain parts of the work outside normal working hours in order to avoid undesirable conditions. The Contractor shall do this work at such times, and at no additional cost to the Owner. Do not make connections between existing work and new work until necessary inspection and tests have been completed on the new work and it is found to conform in all respects to the requirements of the Contract Documents.

2.1.2 Work on existing structures and facilities shall be performed on a schedule and in a manner that will permit the existing facility to operate continuously.

2.2 COORDINATION:

2.2.1 Contractors shall cooperate in the coordination of their separate activities in a manner that will provide the least interference with the Owner's operations and other contractors and utility companies working in the area, and in the interfacing and connection of the separate elements of the overall project work.

2.2.2 If any difficulty or dispute should arise in the accomplishment of the above, the problem shall be brought immediately to the attention of the Owner.

2.2.3 All Contractors working on this site are subject to this requirement for cooperation, and all shall abide by the Owner's decision in resolving project coordination problems without additional cost to the Owner.

2.3 SHUTDOWN OF EXISTING OPERATIONS OR UTILITIES:

2.3.1 Continuous operation of the Owner's existing plant is of critical importance.

2.3.2 Connections to existing services or utilities, or other work that requires the temporary shutdown of any existing operations or utilities shall be planned in detail with appropriate scheduling of the work and coordinated with the Owner. The approved schedule for shutdown or restart shall be indicated on the Contractor's Progress Schedule, and advance notice shall be given in order that the Owner may witness the shutdown, tie-in, and startup.

2.3.3 All materials and equipment (including emergency equipment) necessary to expedite the tie-in shall be on hand prior to the shutdown of existing services or utilities.

2.4 PROGRESS OF WORK:

2.4.1 The work shall proceed in a systematic manner so that a minimum of inconvenience will result to the Owner and public in the course of work. It is, therefore, necessary to confine operations to as small a length of work area per crew as is practical. The safety conditions of open excavations shall be the Contractor's responsibility. Completely backfill and clean up after each section of pipe has been removed, inspected, and approved.

2.4.2 Clean up construction debris, excess excavation, excess materials, and completely restore fences, mailboxes, ditches, culverts, signposts, and similar items immediately following the final backfilling.

3. SITE CONDITIONS

3.1 SITE INVESTIGATION AND REPRESENTATION:

3.1.1 The Contractor acknowledges satisfaction as to the nature and location of the work, the general and local conditions, particularly those bearing upon availability of transportation, access to the site, disposal, handling and storage of materials, availability of labor, water, electric power, roads, and uncertainties of weather, river stages, or similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment and facilities needed preliminary to and during the prosecution of the work, and all other matters which can in any way affect the work or the cost thereof under this Contract.

3.1.2 The Contractor further acknowledges satisfaction as to character, quality, and quantity of surface and subsurface materials to be encountered from his inspection of the site and from reviewing any available records of exploratory work furnished by the Owner. Failure by the Contractor to become acquainted with the physical conditions of the site and all the available information will not relieve the Contractor from responsibility for properly estimating the difficulty or cost of successfully performing the work.

3.1.3 The Contractor warrants that as a result of examination and investigation of all the aforesaid data, the Contractor can perform the work in a good and workmanlike manner and to the satisfaction of the Owner. The Owner assumes no responsibility for any representations made by any of its officers or agents during or prior to the execution of this Contract, unless (1) such representations are expressly stated in the Contract, and (2) the Contract expressly provides that the responsibility therefor is assumed by the Owner.

3.2 INFORMATION ON SITE CONDITIONS: Any information obtained by the Owner regarding site conditions, subsurface information, groundwater elevations, existing construction of site facilities as applicable, and similar data will be available for inspection upon request. Such information is offered as supplementary information only. Neither the Owner nor the Owner's Representative assumes any responsibility for the completeness or interpretation of such supplementary information.

3.3 DIFFERING SUBSURFACE CONDITIONS:

3.3.1 In the event subsurface or latent physical conditions are found materially different from those indicated in these Documents, and differing materially from those ordinarily encountered and generally recognized as inherent in the character of work covered in these Contract Documents, the Contractor shall promptly, and before such conditions are disturbed, notify the Owner in writing of such changed conditions.

3.3.2 The Owner will investigate such conditions promptly and following this investigation, the Contractor shall proceed with the work, unless otherwise instructed by the Owner. If the Owner finds that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for performing the work, the Owner will determine the amount of adjustment in cost and time he considers reasonable. The Owner will make the final decision on all Change Orders to the Contract regarding any adjustment in cost or time for completion.

3.4 UTILITIES: The following is a list of the major utilities serving the work area indicating the name and telephone number of the responsible authority of the various utilities which should be notified if conflicts or emergencies arise during the progress of the work:

<u>Name of Utility</u>	<u>Responsible Person</u>	<u>Telephone No.</u>
Water	East Bay Municipal Utility District	451-3440
Sewers	East Bay Municipal Utility District	451-3440
Electricity	Pacific Gas and Electric	834-1234
Gas	Pacific Gas and Electric	834-1234
Telephone	Pacific Bell	811-6044
Railway	Southern Pacific Transportation Company	891-7459

3.5 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTIES AND SERVICE:

3.5.1 Where the Contractor's operations could cause damage or inconvenience to railway, telegraph, telephone, television, power, oil, gas, water, sewer, or irrigation systems, the operations shall be suspended until all arrangements necessary for the protection of these utilities and services have been made by the Contractor.

3.5.2 Notify all utility offices which are affected by the construction operation at least 48 hours in advance. In states where one-call utility location services are available and their use is required by law, provide appropriate notification. Under no circumstances expose any utility without first obtaining permission from the appropriate agency. Once permission has been granted, locate, expose, and provide temporary support for all existing underground utilities.

3.5.3 Power poles less than 5 feet from the excavation will be removed or protected at no cost to the Owner. Protect all other poles from damage. If interfering power poles, telephone poles, guy wires, or anchors are encountered, notify the Owner and the appropriate utility company at least 48 hours in advance of construction operations to permit the necessary arrangements for protection or relocation of the interfering structure.

3.5.4 The Contractor shall be solely and directly responsible to the Owner and operators of such properties for any damage, injury,

expense, loss, inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage which may result from the construction operations under this Contract.

3.5.5 Neither the Owner nor its officers or agents shall be responsible to the Contractor for damages as a result of the Contractor's failure to protect utilities encountered in the work.

3.5.6 If the Contractor while performing the Contract discovers utility facilities not identified by the public agency in the Contract Drawings or Specifications, he shall immediately notify the public agency and utility in writing.

3.5.7 The public utility, where they are the owner, shall have the sole discretion to perform repairs or relocation work or permit the Contractor to do such repairs or relocation work at a reasonable price.

3.5.8 In the event of interruption to domestic water, sewer, storm drain, or other utility services as a result of accidental breakage due to construction operations, promptly notify the proper authority, cooperate with said authority in restoration of service as promptly as possible and bear all costs of repair. In no case shall interruption of any water or utility service be allowed to exist outside working hours unless prior approval is granted.

3.5.9 In the event the Contractor encounters water service lines that interfere with excavation, he may, by obtaining prior approval of the property owner, Water Department, or Fire Department as applicable, and the Owner, cut the service, dig through, and restore the service with similar and equal materials at the Contractor's expense.

3.5.10 Drainage culverts which are at or near right angles to the excavation and are removed by the Contractor shall be replaced in kind at the expense of the Contractor.

3.5.11 The Contractor shall replace, at his own expense, all existing utilities or structures removed or damaged during construction, unless otherwise provided for in these Contract Documents or ordered by the Owner.

3.6 INTERFERING STRUCTURES:

3.6.1 Take necessary precautions to prevent damage to existing structures whether on the surface, aboveground, or underground. An attempt has been made to show major structures on the Drawings. The completeness and accuracy of information shown cannot be guaranteed, and it is presented simply as a guide to avoid known possible difficulties.

3.6.2 Protect underground and aboveground existing structures from damage, whether or not they lie within the limits of the easements obtained by the Owner. Where such existing fences, gates, barns, sheds, buildings, or any other structure must be removed in order to properly carry out the construction, or are damaged during construction, restore to their original condition to the satisfaction of the property owner involved at the Contractor's own expense. Notify the Owner or Owner's Representative of any damaged underground structure, and make repairs or replacements before backfilling.

3.6.3 Without additional compensation, the Contractor may remove and replace in a condition as good as or better than original, such small miscellaneous structures as fences, mailboxes, and signposts that interfere with the Contractor's operations.

3.7 FIELD RELOCATION: During the progress of construction, it is expected that minor relocations of the work will be necessary. Such relocations shall be made only by direction of the Owner. If existing structures are encountered which prevent the construction, and which are not properly shown on the Drawings, notify the Owner before continuing with the construction in order that the Owner may make such field revisions as necessary to avoid conflict with the existing structures. If the Contractor shall fail to so notify the Owner when an existing structure is encountered, and shall proceed with the construction despite this interference, he shall do so at his own risk.

3.8 EASEMENTS:

3.8.1 Where portions of the work are located on public or private property, easements and permits will be obtained by the Owner. Easements will provide for the use of property for construction purposes to the extent indicated on the easements. Copies of these easements and permits are available upon request to the Owner. It shall be the Contractor's responsibility to determine the adequacy of the easement obtained in every case and to abide by all requirements and provisions of the easement. The Contractor shall confine his construction operations to within the easement limits or street right-of-way limits or make special arrangements with the property owners or appropriate public agency for the additional area required. Any damage to property, either inside or outside the limits of the easements provided by the Owner, shall be the responsibility of the Contractor as specified herein. The Contractor shall remove, protect, and replace all fences or other items encountered on public or private property. Before final payment will be authorized by the Engineer, the Contractor will be required to furnish the Owner with written releases from property owners or public agencies where side agreements or special easements have been made by the Contractor or where the Contractor's operations, for any reason, have not been kept within the construction right-of-way obtained by the Owner.

3.8.2 It is anticipated that the required easements and permits will be obtained before construction is started. However, should the procurement of any easement or permit be delayed, the Contractor shall schedule and perform the work around these areas until such a time as the easement or permit has been secured.

3.9 LAND MONUMENTS: The Contractor shall notify the Owner prior to disturbing any existing federal, state, county, city, and private land monuments. Private and government land monuments shall be preserved or replaced by a licensed surveyor at the Contractor's expense.

4. SAFETY AND CONVENIENCE

4.1 HEALTH AND SAFETY PROGRAM:

4.1.1 The Contractor shall develop and maintain for the duration of this Contract, a Health and Safety Program that will effectively incorporate and implement all required safety provisions. The Contractor shall appoint an employee who is qualified and authorized to supervise and enforce compliance with the Health and Safety Program.

4.1.2 The duty of the Owner's Representative to conduct review of the Contractor's performance is not intended to include a review or approval of the adequacy of the Contractor's health and safety supervisor, the Health and Safety Program, or any safety measures taken in, on, or near the site.

4.1.3 The Contractor shall be familiar with and comply with all applicable safety codes, ordinances, and statutes, and bear sole responsibility for the penalties imposed for noncompliance.

4.2 SAFETY EQUIPMENT:

4.2.1 The Contractor, as part of his Health and Safety Program, shall maintain at a well-known place at the jobsite, safety equipment applicable to the work as prescribed by the governing safety authorities, all articles necessary for giving first-aid to the injured, and shall establish the procedure for the immediate removal to a hospital or a doctor's care of any person who may be injured on the jobsite. All safety equipment shall be readily accessible before excavation begins. The Contractor shall be responsible for directing the use of personal protective clothing and equipment.

4.2.2 The Contractor shall do all work necessary to protect the general public from hazards, including, but not limited to, surface irregularities or unramped grade changes in pedestrian sidewalk or walkway, and trenches or excavations in roadway. Barricades, lanterns, and proper signs shall be furnished in sufficient amount to safeguard the public and the work.

4.2.3 The performance of all work and all completed construction, particularly with respect to ladders, platforms, structure openings, scaffolding, shoring, lagging, machinery guards and the like, shall be in accordance with the applicable governing safety authorities.

4.2.4 During construction, the Contractor shall construct and at all times maintain satisfactory and substantial temporary chain link fencing, solid fencing, railing, barricades or steel plates, as applicable, at all openings, obstructions, or other hazards in streets, sidewalks, floors, roofs, and walkways. All such barriers shall have adequate warning lights and conspicuously placed markers as necessary, or required, for safety and to prevent unknowing entry onto the worksite.

4.3 ACCIDENT REPORTS:

4.3.1 If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to the Owner. In addition, the Contractor must promptly report in writing to the Owner all accidents whatsoever arising out of, or in connection with, the performance of the work whether on, or adjacent to, the site, giving full details and statements of witnesses.

4.3.2 If a claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the Owner, giving full details of the claim.

4.4 SAFE ACCESS: The Contractor shall at all times maintain safe and continuous access to the work for the Owner and federal, state, and local government officials, and the Contractor shall provide proper facilities for such access and inspection.

4.5 TRAFFIC MAINTENANCE AND SAFETY:

4.5.1 Comply with all rules and regulations of the state, county, and city authorities regarding closing or restricting the use of public streets or highways. No public or private road shall be closed, except by express permission of the Owner. Conduct the work so as to assure the least possible obstruction to traffic and normal commercial pursuits. Protect all obstructions within traveled roadways by installing approved signs, barricades, and lights where necessary for the safety of the public. The convenience of the general public and residents adjacent to the project, and the protection of persons and property are of prime importance and shall be provided for in an adequate and satisfactory manner.

4.5.2 Where traffic will pass over trenches after they are backfilled and before they are paved, the top of the trench shall be maintained in a condition that will allow normal vehicular traffic to pass over. Temporary access driveways must be provided where required. Cleanup operations shall follow immediately behind

backfilling and the worksite shall be kept in an orderly condition at all times.

4.5.3 When flaggers and guards are required by regulation or when deemed necessary for safety, they shall be furnished with approved orange wearing apparel and other regulation traffic-control devices.

4.6 TRAFFIC CONTROL: Traffic control on all County and State of California highway rights-of-way shall meet the requirements of the current edition (including all amendments) of the Manual on Uniform Traffic Control Devices for Streets and Highways published by the U.S. Department of Transportation Federal Highway and Administration as adopted by the State of California and all State of California Supplements.

4.7 PROTECTION OF PROPERTY:

4.7.1 Protect stored materials, cultivated trees and crops, and other items located adjacent to the proposed work. Notify property owners affected by the construction at least 48 hours in advance of the time construction begins. During construction operations, construct and maintain such facilities as may be required to provide access by all property owners to their property. No person shall be cut off from access to his residence or place of business for a period exceeding 8 hours, unless the Contractor has made special arrangements with the affected persons.

4.8 USE OF EXPLOSIVES: Explosives shall not be used on this project.

4.9 FIRE PREVENTION AND PROTECTION:

4.9.1 The Contractor shall perform all work in a fire-safe manner. He shall supply and maintain on the site adequate fire-fighting equipment capable of extinguishing incipient fires. The Contractor shall comply with applicable federal, state, and local fire-prevention regulations. Where these regulations do not apply, applicable parts of the National Fire Prevention Standard for Safeguarding Building Construction Operations (NFPA No. 241) shall be followed.

4.10 ACCESS FOR POLICE, FIRE, AND POSTAL SERVICE:

4.10.1 Notify the fire department and police department before closing any public or private street or portion thereof. No closing shall be made without the Owner's approval. Notify said departments when the streets are again passable for emergency vehicles. Conduct operations with the least interference to fire equipment access, and at no time prevent such access.

4.10.2 The Contractor shall leave a night emergency telephone number or numbers with the police department and other appropriate

authorities so that contact may be made easily at all times in case of barricade and flare trouble or other emergencies.

5. PROTECTION OF THE ENVIRONMENT

5.1 GENERAL:

5.1.1 The Contractor shall maintain all work areas within and outside the project boundaries free from environmental pollution which would be in violation of any federal, state, or local regulations.

5.1.2 The Contractor shall conduct all work in a manner that will minimize the potential for releases of hazardous materials into the environment.

5.2 PROTECTION OF SEWERS: Take adequate measures to prevent the impairment of the operation of existing sewer systems. Prevent construction material, pavement, concrete, earth, or other debris from entering a sewer or sewer structure.

5.3 PROTECTION OF WATERWAYS:

5.3.1 The Contractor shall observe the rules and regulations of local agencies, the State of California, and agencies of the United States Government prohibiting the pollution of stream or river waters by the dumping of any refuse, rubbish, or debris therein.

5.3.2 All sewage flow, including storm water flow, interfering with construction and requiring diversion, shall be diverted to sewers leading to water pollution control plants and shall not be directed to any waterway. The Contractor shall not cause or permit any action to occur which would cause an overflow to an existing waterway. Prior to commencing excavation, the Contractor shall submit for approval, and obtain Owner's approval thereof, of detailed plans showing how he intends to handle and dispose of sanitary, groundwater, and storm water flow. By approving the plan, the Owner does not accept any responsibility for the adequacy thereof nor for any damages to public or private property resulting therefrom, such responsibilities remaining with the Contractor.

5.3.3 The Contractor shall be responsible for providing holding ponds or an approved method which will handle, carry through, or divert around his work all flows, including storm flows, so as to prevent excessive silting of waterways or flooding damage to the property.

5.4 DEWATERING:

5.4.1 The Contractor shall construct, maintain, and operate all necessary pumping and other equipment for the environmentally-safe removal and disposal of water from the various parts of the work and

for maintaining foundations and other parts of the work free from water.

5.4.2 The Contractor's method for removing water from excavations shall be subject to the approval of the Owner's Representative. Where an excavation extends below the water table, dewatering shall be accomplished in a manner that will prevent loss of fines from the foundation, will maintain stability of the excavated slopes and bottom of the excavation, will result in water being discharged into acceptable sewers or storage facilities, and will result in all operations being performed in the dry. The Contractor will also be required to control seepage along the bottom of the excavation.

5.4.3 The Contractor must receive approval from concerned federal, state, and local agencies prior to any discharge of water removed from excavations. Contractor shall be responsible for sampling the water for approval as required prior to discharge to sewers. The Owner reserves the right to approve or disapprove the method of discharge of water pumped from excavated areas.

5.5 PROTECTION OF AIR QUALITY:

5.5.1 The air pollution likely to occur due to operations shall be minimized by using dust control methods during windy periods, requiring the use of properly operating combustion emission control devices on vehicles and equipment used by contractors, and by encouraging the shutdown of motorized equipment not actually in use. Vapor control, if needed, shall be provided by the Contractor.

5.5.2 Trash burning will not be permitted on the construction site.

5.5.3 If temporary heating devices are necessary, such devices shall be of an approved type that will not cause pollution of the air.

5.6 NOISE CONTROL:

5.6.1 General: The Contractor shall conduct all his work, use appropriate methods and equipment, and furnish and install acoustical barriers, all as necessary so that no noise emanating from the process or any related tool or equipment will exceed legal noise levels.

5.6.2 Nighttime Work: If the Contractor desires to perform any work between the hours of 5 p.m. and 5:30 a.m., he shall obtain all necessary permits from the appropriate agencies and make all necessary arrangements prior to commencing.

6. PRESERVATION, RESTORATION, AND CLEANUP

6.1 SITE RESTORATION AND CLEANUP:

6.1.1 At all times during the work, keep the premises clean and orderly, and upon completion of the work, repair all damage caused by equipment and leave the project free of rubbish or excess materials of any kind.

6.1.2 Stockpile excavated materials in a manner that will cause the least damage to adjacent lawns, grassed areas, gardens, shrubbery, or fences, regardless of whether these are on private property, or on state, county, or city rights-of-way. Remove all excavated materials from grassed and planted areas, and leave these surfaces in a condition equivalent to their original condition. Replace pavement areas as specified in Section TANK REMOVAL AND DISPOSAL, raked and graded to conform to their original contours.

6.1.3 All existing drainage ditches and culverts shall be reopened and graded and natural drainage restored. Restore culverts broken or damaged to their original condition and location.

6.1.4 The finished surface shall conform to the original surface, and shall be free-draining and free from rough spots, bird baths, or other surface features detrimental to the pavement area.

6.2 FINISHING OF SITE, BORROW, AND STORAGE AREAS: Upon completion of the project, all areas used by the Contractor shall be properly cleared of all temporary structures, rubbish, and waste materials and properly graded to drain and blend in with the abutting property. Areas used for the deposit of waste materials shall be finished to properly drain and blend with the surrounding terrain.

6.3 REMOVAL OF ROCK FROM FINISHED SURFACES: Remove and dispose of all loose rock and boulders larger than 2-inch diameter occurring on the finished surfaces as a result of the construction operations.

6.4 STREET CLEANUP DURING CONSTRUCTION: Thoroughly clean all spilled dirt, gravel, or other foreign material caused by the construction operations from all streets and roads at the conclusion of each day's operation.

6.5 DUST PREVENTION: Give all unpaved streets, roads, detours, or haul roads used in the construction area an approved dust-preventive treatment. Applicable environmental regulations for dust prevention shall be strictly enforced.

7. SAMPLES AND TEST SPECIMENS

7.1 Where required in the Specifications, and as determined necessary by the Owner, test specimens or samples of materials, appliances, and fittings to be used or offered for use in connection with the work shall be submitted to the Owner at the Contractor's expense, with information as to their sources, with all cartage charges prepaid, and in such quantities and sizes as may be required for proper examination and tests to establish the quality or equality thereof, as applicable.

7.2 All samples and test specimens shall be submitted in ample time to enable the Owner to make any tests or examinations necessary, without delay to the work. The Contractor will be held responsible for any loss of time due to his neglect or failure to deliver the required samples to the Owner, as specified.

7.3 Samples also shall be taken during the course of the work, as required by the Owner or Owner's Representative. Contractor shall assist Owner or Owner's Representative with collection of samples at no cost to Owner.

7.4 Laboratory tests and examinations that the Owner elects to make in its own laboratory will be made at no cost to the Contractor, except that, if a sample of any material or equipment proposed for use by the Contractor fails to meet the Specifications, the cost of testing subsequent samples shall be borne by the Contractor.

7.5 All tests required by the Specifications to be performed by an independent laboratory shall be made at the sole expense of the Contractor.

7.6 Material used in the work shall conform with the submitted samples and test certificates as approved by the Owner.

8. SUBMITTALS DURING CONSTRUCTION

8.1 GENERAL:

8.1.1 Requirements in this section are in addition to any specific requirements for submittals specified in other sections of these Contract Documents.

8.1.2 Submittals to the Owner shall be addressed to: Mr. Worth Cornelius, Longview Fibre Co., 8511 Blaine Street, Oakland, California.

8.1.3 Submittals to the Owner's Representative shall be addressed to: Ms. Deanne L. Fischer, CH2M HILL, 6425 Christie Avenue, Suite 500, Emeryville, California 94608.

8.1.4 Submitted data shall be fully sufficient in detail for determination of compliance with the Contract Documents.

8.1.5 Review, acceptance, or approval of substitutions, schedules, shop drawings, lists of materials, and procedures submitted or requested by the Contractor shall not add to the Contract amount, and all additional costs which may result therefrom shall be solely the obligation of the Contractor.

8.1.6 The Owner is not precluded, by virtue of review, acceptance, or approval, from obtaining a credit for construction savings resulting from allowed concessions in the work or materials therefor.

8.1.7 It shall not be the responsibility of the Owner to provide engineering or other services to protect the Contractor from additional costs accruing from such approvals.

8.1.8 No equipment or material for which listings, drawings, or descriptive material is required shall be installed until the Owner has on hand copies of such approved lists and the appropriately stamped final shop drawings.

8.1.9 The review of drawings by the Owner will be limited to general design requirements only, and shall in no way relieve the Contractor from responsibility for errors or omissions contained therein.

8.1.10 Submittals will be acted upon by the Owner as promptly as possible. Delays caused by the need for resubmittals shall not constitute reason for an extension of Contract time.

8.2 SUBMITTAL PROCEDURE: The Contractor shall submit four copies, to the Owner's Representative for his review, as described in the General Conditions and Supplementary Conditions. Shop drawings shall be submitted in sufficient time to allow the Owner's Representative not less than 5 regular working days for examining the shop drawings.

9. SCHEDULE

Job Walk	December 7, 1987	Owner Estimate
Distribute Specifications	December 9, 1987	Owner Estimate
Bids Due/Bid Opening	December 15, 1987	Contractor Requirement
Award of Contract	Within 2 days of Bid Opening	Owner Estimate
Contract Signature and Insurance Certificate and Bonds	Within 2 days of Award of Contract	Contractor Requirement
Contract Signature/Notice to Proceed	Within 2 days of Contract Signature by Contractor	Owner Estimate
Intermediate Deadlines	See below	Contractor Requirement

Removal of Tanks T-1 and T-2 shall be performed during facility off-hours between December 22, 1987 and January 1, 1988 including removal, disposal, backfill and surface restoration. The actual removal of Tanks T-1 and T-2 shall be performed on December 24, 1987.

Removal of Tank T-3 shall be performed at night between the hours of 5:00 p.m. and 5:30 a.m., or during other times and using such techniques as required to keep all construction activities completely clear of the access driveway.

The schedule for removal of Tank T-4 is not critical as it is not located within the facility's operating area.

Intermediate deadlines are based upon notice to proceed on or before December 22, 1987.

Work Complete	Within 60 days after Notice to Proceed	Contractor Requirement
---------------	--	------------------------

10. PAYMENT

10.1 Payment for the work in this section will be included as part of the lump sum bid or applicable unit prices stated in the Proposal.

10.2 Where field measurement is necessary for payment of unit price items, the Contractor and the Owner's Representative shall agree on the method of measurement and calculation of quantities prior to beginning any of the work.

10.3 The Contractor shall provide a competent employee during normal working hours to assist the Owner's Representative, when required, in measuring quantities for payment purposes as the work proceeds. The Contractor shall cooperate with the Owner's Representative so that the measuring may be accomplished with the least interference to the Contractor's operations.

* * * * *

02015
MOVE IN AND SITE PREPARATION

1. SCOPE

1.1 WORK INCLUDED: This section covers the work to move in Contractor's personnel and equipment, set up all temporary offices, utilities, other facilities necessary to expeditiously perform the Contract work, and prepare the site for construction, complete.

1.2 GENERAL:

1.2.1 The limits of the site and areas for Contractor's temporary facilities shall be designated by the Owner.

1.2.2 In the event additional space is required for the Contractor's operations, the Contractor shall make his own arrangements with other property owners and pay for such additional space.

2. MATERIALS

2.1 TEMPORARY FACILITIES: The Contractor shall provide all temporary facilities as required for performing the work.

2.2 TEMPORARY UTILITIES: The names of utility firms serving the area are included in Division 1, GENERAL REQUIREMENTS. The Contractor shall obtain the necessary permits for connection to these services.

2.3 STORMWATER MANAGEMENT: Materials, equipment, and work required for temporary stormwater management during the construction period shall be provided as specified in Division 1, GENERAL REQUIREMENTS.

2.4 SECURITY FENCE: Contractor's security fence may be constructed for the protection of the Contractor's materials, tools, and equipment.

2.5 PARKING FACILITIES: Provide parking facilities for personnel working on the project. No employee or equipment parking will be permitted on the Owner's existing paved areas, except as specifically designated for Contractor's use.

3. WORKMANSHIP

3.1 CLEARING THE SITE: Specified in Division 2, Section 02102, CLEARING.

3.2 LAYOUT: Set up construction facilities in a neat and orderly manner within designated area at location of choice. Accomplish all required work in accordance with applicable portions of these Specifications. Confine operations to work area shown.

3.3 OBSTRUCTIONS:

3.3.1 Some obstructions may not be shown. Bidders are advised to carefully inspect the existing facilities before preparing their proposals. The removal and replacement of minor obstructions such as electrical conduits, air, water, waste piping, and similar items shall be anticipated and accomplished, even though not shown or specifically mentioned.

3.3.2 Major obstructions encountered that are not shown on the Drawings, or could not have been foreseen by visual inspection of the site prior to bidding, should immediately be brought to the attention of the Engineer. The Engineer will make a determination for proceeding with the work. If the Engineer finds that the obstruction adversely affects the Contractor's costs or schedule for completion, a proper adjustment to the Contract will be made in accordance with the Article CHANGE ORDERS in the Supplementary Conditions.

4. PAYMENT

4.1 GENERAL:

4.1.1 Payment for the work under this section shall be considered as included in the various items of work stated in the Proposal and no separate compensation will be allowed therefor.

* * * * *

02102
CLEARING

1. SCOPE

1.1 WORK INCLUDED:

1.1.1 This section covers the work necessary to remove all interfering or objectionable material from the designated areas of work designated in the Specifications or as directed by the Engineer.

1.1.2 This work shall also include the preservation from injury or defacement of all existing objects and existing facilities designated to remain, as specified herein or as directed by the Engineer.

1.1.3 Review with the Engineer the location, limits, and methods to be used prior to commencing the work under this section.

2. MATERIALS AND PROCEDURES

2.1 GENERAL: Provide all materials, suitable and in adequate quantity, required to accomplish the work as specified herein.

2.2 CLEARING:

2.2.1 Definition: Clearing shall consist of cutting, removing, and disposing of all interfering objects and facilities required to perform the work as authorized or designated by the Engineer, and shall be performed in such a manner as to remove all evidence of their presence from the work area. Clearing shall also include the removal and disposal of trash piles, rubbish, and fencing; and the preservation of existing facilities which are not designated for removal.

2.3 PRESERVATION OF PROPERTY: Protect existing facilities not designated for removal from damage resulting from the work. All damages resulting from the Contractor's operation shall be restored to its original condition at the Contractor's expense.

2.4 DISPOSAL OF CLEARING DEBRIS: No burning of combustible materials will be permitted. Remove all cleared material from the worksite and dispose of in accordance with all local laws, codes, and ordinances.

3. PAYMENT

3.1 GENERAL: Payment for the work in this section will be considered incidental to and included in the various items of work stated in the Proposal and no separate payment will be made.

* * * * *

02222
TANK REMOVAL AND DISPOSAL

1. SCOPE

1.1 WORK INCLUDED:

1.1.1 This section covers the work necessary to locate, excavate, remove, and dispose of existing underground tanks and debris and restore the site.

1.1.2 Tanks to be located, excavated, removed, and disposed of include the following:

<u>Tank No.</u>	<u>Size (gal)</u>	<u>Construction</u>	<u>Contents</u>
T-1	10,000	Fiberglass	Fuel Oil
T-2	10,000	Fiberglass	Fuel Oil
T-3	Unknown	Steel	Fuel Oil
T-4	Unknown	Steel	Gasoline

1.2 GENERAL:

1.2.1 The Contractor shall be responsible for and provide equipment, materials, and personnel to locate, excavate, remove, and dispose of underground storage tanks and associated equipment and debris in accordance with federal, state, and local regulations. Associated contaminated soil, if present, shall be removed and disposed of in accordance with federal, state, and local regulations. The amount of soil to be removed will be determined by the Owner.

1.2.2 No excavated tanks or associated equipment shall be considered reusable unless permission for salvage is granted by Owner.

1.2.3 Excavation, General:

1.2.3.1 Excavation is unclassified. Complete all excavation regardless of the type of materials encountered unless directed by Owner to stop. The Contractor shall make his own estimate of the kind and extent of the various materials which will be encountered in the excavation.

1.2.3.2 If, through no activities of the Contractor, excavated materials are determined by Owner to be a hazardous waste according to 40 CFR 261 or state regulations, Contractor shall be required to

arrange for transport or disposal of such excavated materials. Contractor shall be fully responsible for cleanup of any contaminated materials resulting from the activities of the Contractor. Owner does not anticipate encountering hazardous waste at this site.

1.2.4 Surface Restoration, General: Surface shall be restored to condition of surrounding area as described herein.

1.3 SUBMITTALS:

1.3.1 Submittals shall be made in accordance with Section 01001, GENERAL REQUIREMENTS, Section 01010, SUMMARY OF WORK, and the requirements of this section.

1.3.2 The Contractor shall provide the following submittals:

- A. Location map indicating exact location of Tanks T-3 and T-4.
- B. Proposed protection plan for removal of Tank T-3.
- C. Proposed Tank Removal Plan for Tanks T-1, 2, 3, and 4
- D. Prior to removal from site, a copy of the documentation of permission for disposal of excavated materials. Owner will have the right to approve or reject disposal facilities.
- E. A copy of the state and local permits required to remove underground tanks. Owner will provide any closure plans required pursuant to 40 CFR 264.112 or 265.112.
- F. A copy of the record of disposal of unusable tanks and excavated materials.
- G. Copy of Hazardous Waste Manifests.
- H. Transportation plan for disposal of waste including transportation route to disposal facility.

2. MATERIALS

2.1 IMPORTED SAND BACKFILL: Imported sand backfill materials shall be free from dirt, clay balls, and organic material, containing sufficient finer material for proper compaction and conforming to the following sieve gradation:

<u>Sieve Size</u>	<u>Percent Passing by Weight</u>
No. 4	90 - 100
No. 200	0 - 4

2.2 SURFACE RESTORATION:

2.2.1 Rock for Portland Cement Concrete Pavement (PCCP) Base:

2.2.1.1 Rock shall be crushed gravel or rock meeting the following quality standards:

Abrasion (AASHTO T 96)	Maximum wear	35 percent
Fractured face	Minimum particles	75 percent
Liquid limit (AASHTO T 89)	Not greater than	30 percent
Plasticity index (AASHTO T 91)	Not greater than	6 percent

2.2.1.2 The aggregate shall consist of uniform quality, clean, tough, durable fragments of rock or gravel, free from flat, elongated, soft or disintegrated pieces, and other objectionable matter occurring either free or as a coating on the stone.

2.2.1.3 Based on U.S. standard sieves, the gradation of the aggregates to be furnished shall be as indicated below:

GRADATION

<u>Sieve Designation</u> <u>(Square Opening)</u>	<u>Percent Passing by Weight</u>	
	<u>3/4-Inch Minus</u>	
1-inch	-	100
3/4-inch	90	- 100
3/8-inch	60	- 80
1/4-inch	40	- 60
No. 200	0	- 5

2.2.1.4 Submit proof in the form of test results from a commercial testing laboratory or other evidence satisfactory to the Engineer to show that the materials meet the quality and gradation requirements.

2.2.2 Portland Cement Concrete Pavement (PCCP): Concrete for portland cement concrete pavement and miscellaneous construction shall conform to ASTM C 94, Alternate 3; and shall have a design mix proportioned for 3,000 pounds per square inch compressive strength at 28 days. Cement shall be Type III high early strength. Concrete mix shall contain no less than 5-1/2 sacks of cement per cubic yard. Portland Cement Concrete Pavement shall conform to the provisions in Section 90-2.01 of the State of California Department of Transportation Standard Specifications July 1984 edition.

2.2.2.1 Concrete Forms: All forms for curbs and sidewalks shall be either 2-inch dimensioned lumber, plywood, or metal forms. Forms on the face of the curb shall have no horizontal form joints within 7 inches of the top of the curb.

2.2.2.2 Curing Compound: Commercial grade conforming to ASTM C 309, Type I.

2.2.2.3 Reinforcing Steel: Conform to ASTM A 615, Grade 40.

2.2.2.4 Premolded Expansion Joint Fillers: Expansion joint fillers shall be premolded 1/4-inch thick conforming to ASTM D1751.

2.2.2.5 Sealant: Sealant material for construction or expansion joint between existing and new PCCP shall be Polyurethane base, single-component, chemical curing conforming to Federal Specification TT-S-00230; capable of being continuously immersed in water, withstand movement of up to 25 percent of joint width; Shore A hardness of minimum 15 and maximum 50; nonstaining, nonbleeding; Vulkem 45 manufactured by Mameco International; Sikaflex 12SL manufactured by Sika Chemical Corporation; or equal.

2.3 COMPACTION EQUIPMENT: Compaction equipment shall be of suitable type and adequate to obtain the amount of compaction specified. Compaction equipment shall be operated in strict accordance with the manufacturer's instructions and recommendations and shall be maintained in such condition that it will deliver the manufacturer's rated compactive effort.

3. WORKMANSHIP

3.1 SAFETY REQUIREMENTS:

3.1.1 The Contractor shall follow safety procedures outlined in Section GENERAL REQUIREMENTS and in Contractor's Health and Safety program during all phases of underground tank removal to protect the health and safety of all persons and property in the vicinity of the project site.

3.1.2 The Contractor shall be familiar with, and comply with, all applicable safety codes, ordinances, and statutes and bear sole responsibility for the penalties imposed for noncompliance.

3.1.3 The Contractor shall at all times maintain safe and continuous access to the work for the Owner and federal, state, and local authorities.

3.1.4 The Contractor shall be responsible for barricading off any excavation area and conspicuously placing markers to prevent unknowing entry onto the worksite.

3.1.5 All safety equipment (for example, combustible gas meter, organic vapor analyzer, fire extinguisher, sparkproof tools, respirators, and personal protective clothing and equipment) shall be readily accessible before excavation begins. The Contractor is responsible for directing the use of personal protective clothing and equipment (including respirators) and for requiring a work shutdown if necessary.

3.2 UTILITIES AND STRUCTURES:

3.2.1 It is the responsibility of the Contractor to verify the locations of utilities within the construction area and to protect all utilities from damage during the construction. If utility lines are exposed by excavation, further excavation shall stop until the Owner is notified of the situation.

3.2.2 The Contractor shall be responsible for the protection of structures from damage due to construction. If work cannot proceed without removal or damage to structures, notify the Owner immediately and halt work until the situation is resolved to the satisfaction of the Owner.

3.2.3 Any damages to existing facilities and utilities resulting from the Contractor's activities shall be repaired immediately by the Contractor, to the satisfaction of the Owner, at no additional cost to the Owner. The contractor shall be fully responsible for the cleanup and disposal of spills, contaminated soils, and materials resulting from the activities of the Contractor in the execution of the work. Said cleanup and disposal shall be performed at no additional cost to the Owner.

3.3 OBSTRUCTIONS:

3.3.1 This item refers to obstructions which may be removed and do not require replacement. Remove obstructions within the excavation area or adjacent thereto such as trees, tree roots, stumps, brush, abandoned piling, buildings and concrete structures, logs, and debris of all types without additional compensation.

3.3.2 Dispose of obstructions removed from the excavation in accordance with paragraph DISPOSAL OF CLEARED MATERIAL.

3.4 PORTLAND CEMENT CONCRETE PAVEMENT REMOVAL: Cut existing concrete pavement surfacing, regardless of the thickness, prior to excavation with an approved pavement saw, hydrohammer, or approved pavement cutter. Width of the pavement cut shall be the required pit widths necessary to accomplish the tank removal work and the surface restoration work. Concrete pavement materials removed shall be hauled and disposed offsite.

3.5 LOCATION OF TANKS AND PROTECTION OF EXISTING STRUCTURES:

3.5.1 Location of Tanks: The Contractor shall determine location of underground tanks prior to excavation.

3.5.2 Tank T-3 is installed within close proximity to a warehouse building and aboveground storage tanks. The Contractor shall determine exact location of tank T-3 and submit location drawings to Owner's representative. Owner's representative will decide whether to remove tank or abandon in place. If tank removal is decided, Contractor shall utilize tank location information to determine the protection requirements necessary to remove the tank without undermining or damaging the warehouse or aboveground tanks. The Contractor shall submit to the Owner's representative a Proposed Plan of Protection, developed and certified by a registered Civil Engineer in the State of California, prior to proceeding with the excavation of this tank. This submittal will be reviewed in order that the Owner's representative can verify that a protection plan has been developed by a registered Civil Engineer.

Contractor shall determine the exact location of Tank T-4 and submit location drawing to Owner's representative. Owner's representative will decide whether to remove tank or abandon in place. If tank removal is decided, Contractor shall provide adequate protection to avoid settling or damage to surrounding structures as specified herein.

3.6 EXCAVATION

3.6.1 Excavation: Excavation is unclassified. Excavate to the tank tops or as required to accomplish the work. Perform all excavation regardless of the type, nature, or condition of the material encountered. Owner shall determine extent of excavation for soil removal. Allow for shoring working space as required.

3.6.2 Excavation and Removal Safety: The Contractor shall be solely responsible for executing and completing all work in a safe manner. Provide appropriate measures to retain excavation sideslopes and prevent rock falls to protect persons working in or near the excavation.

3.6.3 Shoring, Sheeting, and Bracing of Excavations: Sheet and brace the excavation when necessary to prevent caving during excavation in unstable material, or to protect adjacent structures, property, workers, and the public. Maintain sheeting in place until tank is removed. Shoring and sheeting shall be removed, as the backfilling is done, in a manner that will not permit voids in the backfill. All sheeting, shoring, and bracing of excavation shall conform to the safety requirements of the federal, state, or local public agency having jurisdiction. The most stringent of these requirements shall apply.

3.6.4 Location of Excavated Materials: During excavation, place the excavated material only within the construction easement,

right-of-way, or approved working area. Do not obstruct any private- or public-traveled roadways or streets. Conform to all federal, state, and local codes governing the safe loading of all excavated pits and trenches with excavated material.

3.6.5 Stockpiling Excavated Materials: During excavation, Contractor shall place the excavated soil in a bermed and lined area within the work area. Liner material shall be 10-mil polyethylene, or equivalent, and shall be a continuous sheet covering the stockpile area and berm. Berming shall be by whatever means available to provide minimum 3-inch high continuous berm surrounding the stockpiled material. Stockpiled material shall be covered daily with 10-mil polyethylene film such that incident rainfall will run off outside the bermed area. Polyethylene cover shall be taped in place and weighted down to prevent uncovering by wind.

3.6.6 Removal of Water:

3.6.6.1 At all times provide and maintain ample means and devices to promptly remove and contain or dispose of all water entering the excavation during the time the pit is being prepared for the tank removal operations, during the tank removal, and until the backfill has been completed. These provisions shall apply during the noon hour as well as overnight.

3.6.6.2 Dispose of the water in accordance with federal, state, and local statutes, ordinances, and regulations and in a manner to prevent damage to adjacent property, storm sewers, sewers, surface, and groundwater.

3.6.6.3 Contractor is responsible for obtaining approval from concerned federal, state, and local authorities for discharge of water. Owner reserves the right to approve or disapprove of discharge method.

3.7 TANK EXCAVATION AND REMOVAL:

3.7.1 The tanks may contain a mixture of potentially hazardous solids, liquids, and sludges. The Contractor shall submit to the Owner for review, a proposed method for tank removal according to the schedule specified in Section GENERAL REQUIREMENTS. Disposal of liquid removed from any tanks shall be the Contractor's responsibility and approved by the Owner. After tank has been removed, Owner or Owner's representative will collect soil samples from the interface between the backfill and native soil. The soil sample collected will be tested for detection of contamination. Results of these tests will not be available until after 24 hours from the time samples are received at the laboratory. Until the test results are made available to the Owner, the Contractor shall not backfill the excavation unless otherwise directed by the Owner or its representative. Contaminated soil, if encountered, shall be removed from around and underneath the location of any tanks, as

directed by the Owner. The Owner or Owner's representative shall approve the limits of contaminated soil removal.

3.7.2 The method of removal of underground tanks shall be accomplished, at a minimum, by following API Recommended Practice as described in API Bulletin 1604 "Recommended Practice for Abandonment or Removal of Used Underground Service Station Tanks." As a minimum, tank removal shall include the following:

- A. The Contractor shall locate, drain, and flush fill, gauge, product, and vent lines into the tank. These pipes, except the fill line, will then be disconnected and cut several feet back from the tank. Open ends of piping shall be capped or plugged. Remove all liquid from the tank that can be pumped out. The Contractor shall be responsible for disposal of all liquids removed from the tank in accordance with federal, state, and local regulations and as approved by the Owner. When pipes have been removed, temporarily plug tank openings.
- B. Contractor shall purge vapors and remove tank using a method approved by the local fire department and in accordance with all federal, state, and local laws. Observe all safety precautions regarding flammable and hazardous vapors. The Contractor shall be responsible for contacting the appropriate authorities and making arrangements for testing and approval. If the tank is not removed immediately following approval, the tank must be rendered inert prior to removal in accordance with fire department policies.
- C. Once removed, the tank shall be placed in a secure location and blocked to prevent movement. The Contractor and Owner will inspect the tanks for corrosion, pitting, leaking seams, and holes.
- D. The tanks shall be rendered inert and cleaned in accordance with all federal, state, and local laws. Washwater shall be collected in a holding tank for testing or for treatment offsite. Washwater may not be discharged without approval of federal, state, and local authorities. The Owner reserves the right to approve or disapprove the discharge location.
- E. Tanks and piping shall be removed from the site for disposal as quickly as possible following removal. Disposal procedures shall conform to all federal, state, and local codes. Final disposition of the tanks shall be certified by the Contractor. Tanks shall not be sold for reuse without Owner approval.

3.8 BACKFILL:

3.8.1 Preparations for Placing Backfill: Do not operate earth-moving equipment within 5 feet of walls of concrete structures for the purpose of depositing or compacting backfill material. Compact backfill adjacent to concrete walls with hand-operated tampers or similar equipment that will not damage the structure.

3.8.2 Sand Backfill: Place as required to minimize voids in the backfill. The moisture content of the materials shall be near the optimum moisture as determined by ASTM D 1557. Compact in maximum 8-inch loose lifts to 90 percent relative compaction per ASTM D 698.

3.9 COMPACTION TESTS AND MOISTURE CONTROL:

3.9.1 In-Place Density and Moisture Testing: The Contractor shall retain an independent testing laboratory to determine in-place density and moisture content during installation of sand backfill and base rock materials. Any one or a combination of the following testing methods is acceptable: ASTM D 1556, D 2167, or D 2922. The Owner reserves the right to require the Contractor a compaction test at any time and location of the backfill materials during the progress of work.

3.9.2 Moisture Control: During the compaction process, maintain moisture control of all backfill materials. The moisture content of the backfill material shall be adjusted by wetting or drying the soil in the stockpile prior to placement within the excavated pit.

3.10 DRAINAGE CULVERTS: In the event that existing drainage culverts are affected or removed due to conflict with the contract work, such culverts shall be replaced in kind at or near right angles to the pipe centerline. If the pipe is damaged during removal, dispose of it and furnish and install new pipe. Dispose of culvert pipe that is to be reinstalled because of age, physical conditions, or other reasons beyond the Contractor's control, and install new pipe furnished by the Owner.

3.11 SETTLEMENT: Any settlement noted in backfill, base rock, fill, or in pavement structures within the 1-year warranty period in accordance with the General Conditions will be considered to be caused by improper compaction methods and shall be corrected at no cost to the Owner. Portland cement concrete pavement damaged by settlement shall be restored to their original condition by the Contractor at no cost to the Owner.

3.12 SURFACE RESTORATION: The surface over tank T-4 shall be restored to conform to the surrounding area.

3.12.1 Rock for PCCP Base: Place a minimum of 12 inches this aggregate base materials. Spreading and compacting shall conform to the provisions in Section 26 of the State (Caltrans) Standard Specifications. Compaction of each layer (8-inch loose lift) of compacted base material shall be not less than 95 percent.

3.12.2 Portland Cement Concrete Pavement (PCCP): Replace all existing PCCP removed or damaged as a result of the tank removal operations, except for the concrete over tank T-4. Preparation of base and placement of PCCP shall conform to the provisions in Section 90-10 of the State (Caltrans) Standard Specifications. PCCP shall be replaced in kind or to a minimum of 8 inches thick as directed by the Engineer. Match existing pavements with original grades unless otherwise directed by the Engineer.

3.12.2.1 Reinforcing steel for the PCCP replacement shall be No. 4 bars spaced at 12 inches on centers in each direction. All installation shall be reviewed and approved by the Owner prior to placement of concrete materials.

3.12.2.2 Premolded expansion/construction joint filler shall be provided when fresh concrete will be placed against an existing concrete surface. The filler shall be placed in correct position (vertical and at least 1/2-inch below finish grade) before placement of concrete materials.

3.12.2.3 Joints to be sealed shall be covered or otherwise protected at all times prior to installing the approved joint sealant materials to prevent debris and other foreign material from entering the joint.

4. PAYMENT

4.1 GENERAL: Payment for the work under this section will be in accordance with the Proposal. Payment for Work, except for those items specified as unit price items, will be included as part of the lump sum bid. Unit price items are:

Item Description

- o Removal and disposal of tank contents (Tanks T-1, 2, 3, and 4)
- o Disposal of water from tank cleaning (Tank T-3)
- o Disposal of contaminated groundwater or rainwater entering excavation (Tank T-3)
- o Excavation and disposal of contaminated excavated materials excluding tank (Tank T-3)
- o Determining location of Tank T-3
- o Preparation of Proposed Protection Plan (Tanks T-3)
- o Provide protection of structures near Tank T-3
- o Excavation and disposal of non-contaminated soil materials for tank removals (Tank T-3)

- o Sawcut, removal and disposal of existing concrete (Tank T-3)
- o Furnish, place and compact sand backfill (Tank T-3)
- o Surface restoration (portland cement, concrete pavement, including reinforcement and base materials) (Tank T-3)
- o Disposal of water from tank cleaning (Tank T-4)
- o Disposal of contaminated groundwater or rainwater entering excavation (Tank T-4)
- o Excavation and disposal of contaminated excavated materials excluding tank (Tank T-4)
- o Determining location of Tank T-4
- o Excavation and disposal of non-contaminated soil materials for tank removals (Tank T-4)
- o Sawcut, removal and disposal of existing concrete (Tank T-4)
- o Furnish, place and compact sand backfill (Tank T-4)
- o Disposal of water from tank cleaning (Tanks T-1 and 2)
- o Disposal of contaminated groundwater or rainwater entering excavations (Tanks T-1 and 2)
- o Excavation and disposal of contaminated excavated material, excluding tanks (Tanks T-1 and 2)
- o Excavation and disposal of non-contaminated materials for tank removal (Tanks T-1 and 2)
- o Sawcut, removal, and disposal of existing concrete pavement (Tanks T-1 and 2)
- o Furnish, placement, and compaction of sand backfill (Tanks T-1 and 2)
- o Surface Restoration (Portland Cement Concrete Pavement, including reinforcement and base materials) (Tanks T-1 and T-2)

* * * * *

ATTACHMENTS

RECEIVED JAN 8 1988 CITY OF OAKLAND

Tank Permit

Permit to Excavate and Install, Repair, or Remove Inflammable Liquid Tanks. No. 9046

Oakland, California, January 6, 1988

PERMISSION IS HEREBY GRANTED TO ~~XXXX~~ remove ~~XXXX~~ Gasoline tank and excavate commencing _____ feet inside _____ line

on the north side of San Leandro Street Avenue 10 feet east of 85th Avenue Street Avenue

House No. 8511 Blaine Street Street Avenue Present Storage _____

Owner Longview Fibre Address 8511 Blaine Street Phone 569-2616

Applicant CH2M Hill Address 6425 Christie Ave. Ste 500 Emeryville, CA 94608 Phone 652-2426

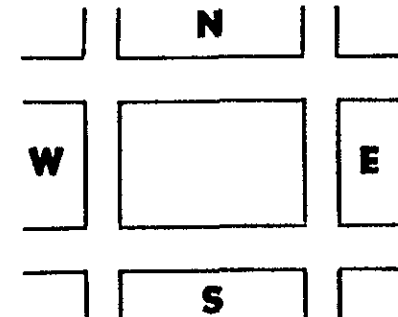
Dimensions of street (sidewalk) surface to be disturbed _____ X _____ Number of Tanks 1 Capacity unknown Gallons, each.

Remarks: tank is installed on S. P. railroad property, leased by Longview Fibre

This Permit is granted in accordance with existing City Ordinances.
Owner hereby agrees to remove tanks on discontinuance of use or when notified by the City Authorities.
When installing, removing or repairing tanks, no open flame to be on or near premises.

Approved _____ Fire Marshal

Approved _____ Drainage Division Engineering Dept.



EXCAVATING PERMIT

Issued in accordance with Ord. No. 278 CMS, Sec. 6-2.04

_____ square feet of digging or removal granted.

The receipt of \$ _____ special deposit is hereby acknowledged.

GENERAL DEPOSIT.

BUREAU OF PERMITS AND LICENSES.

CERTIFICATE OF TANK AND EQUIPMENT INSPECTION

Inspected and passed on _____ 19____

By _____ Fire Marshal

Inspection Fee Paid \$ 50.00 ck#3465 rec# 126067

Received by G. M. Johnson
FIRE PREVENTION BUREAU

NOTICE

Before Covering Tanks, Above Certificate Must Be Signed.

When ready for inspection notify Fire Prevention Bureau, 273-3851

THIS PERMIT MUST BE LEFT ON THE WORK AS AUTHORITY THEREFOR.

CITY OF OAKLAND

Tank Permit

Permit to Excavate and Install, Repair, or Remove Inflammable Liquid Tanks. No. 9047

Oakland, California, _____ January 6, 19 88

PERMISSION IS HEREBY GRANTED TO ~~XXXX~~ remove ~~XXXXX~~ Gasoline tank and excavate commencing _____ feet inside property line

on the south side of Blaine Street Street Avenue 50 feet east of 86th Avenue Street Avenue

House No. 8511 Blaine Street Street Avenue Present Storage empty/fuel oil previously

Owner Longview Fibre Address 8511 Blaine St. Phone 569-2616

Applicant CH2M Hill (Deanne L. Fischer) Address 6425 Christie Ave. Ste. 500 Emeryville Phone 94608 652-2426

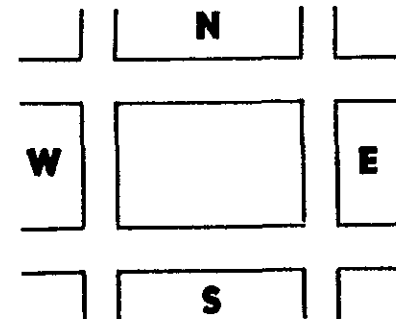
Dimensions of street (sidewalk) surface to be disturbed _____ X _____ Number of Tanks 2 Capacity 10,000 Gallons, each.

Remarks: _____

This Permit is granted in accordance with existing City Ordinances.
Owner hereby agrees to remove tanks on discontinuance of use or when notified by the City Authorities.
When installing, removing or repairing tanks, no open flame to be on or near premises.

Approved _____ Fire Marshal

Approved _____ Drainage Division Engineering Dept.



EXCAVATING PERMIT

Issued in accordance with Ord. No. 278 CMS, Sec. 6-2.04

_____ square feet of digging or removal granted.

The receipt of \$ _____ special deposit is hereby acknowledged.

GENERAL DEPOSIT.

BUREAU OF PERMITS AND LICENSES.

CERTIFICATE OF TANK AND EQUIPMENT INSPECTION

Inspected and passed on _____ 19 _____

By _____ Fire Marshal

Inspection Fee Paid - - - - - \$ 50.00 ck#3465 rec#126067

Received by G. M. Johnson
FIRE PREVENTION BUREAU

NOTICE

Before Covering Tanks, Above Certificate Must Be Signed.

When ready for inspection notify Fire Prevention Bureau, 273-3851

THIS PERMIT MUST BE LEFT ON THE WORK AS AUTHORITY THEREFOR.

CITY OF OAKLAND

Tank Permit

Permit to Excavate and Install, Repair, or Remove Inflammable Liquid Tanks. No. 9048

Oakland, California, January 6, 1988

PERMISSION IS HEREBY GRANTED TO ~~XXXX~~ remove ~~XXXX~~ Gasoline tank and excavate commencing _____ feet inside property line

on the south side of Blaine Street Avenue 30 feet east of 86th Avenue Street Avenue

House No. Longview Fibre 8511 Blaine Street Avenue Present Storage _____

Owner Longview Fibre Address 8511 Blaine Phone 569-2616

Applicant Ch2M Hill (Deanne Fischer) Address 6425 Christie Ave., Ste 500 Emeryville 94608 Phone 652-2426

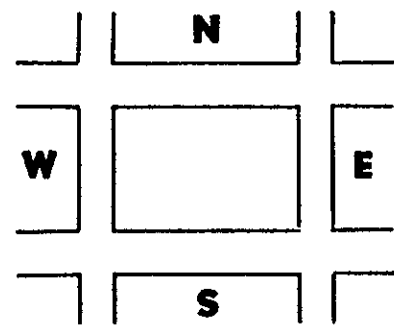
Dimensions of street (sidewalk) surface to be disturbed X Number of Tanks 1 Capacity unknown Gallons, each.

Remarks: _____

This Permit is granted in accordance with existing City Ordinances.
Owner hereby agrees to remove tanks on discontinuance of use or when notified by the City Authorities.
When installing, removing or repairing tanks, no open flame to be on or near premises.

Approved _____ Fire Marshal

Approved _____ Drainage Division Engineering Dept.



EXCAVATING PERMIT

Issued in accordance with Ord. No. 278 CMS, Sec. 6-2.04

_____ square feet of digging or removal granted.

The receipt of \$ _____ special deposit is hereby acknowledged.

GENERAL DEPOSIT.

BUREAU OF PERMITS AND LICENSES.

CERTIFICATE OF TANK AND EQUIPMENT INSPECTION

Inspected and passed on _____ 19__

By _____ Fire Marshal

Inspection Fee Paid - - - - - \$ 50.00 ck#3465 rec#12607

Received by G. M. Johnson _____

FIRE PREVENTION BUREAU

NOTICE

Before Covering Tanks, Above Certificate Must Be Signed.

When ready for inspection notify Fire Prevention Bureau, 273-3851

THIS PERMIT MUST BE LEFT ON THE WORK AS AUTHORITY THEREFOR.

CLOSURE PLAN
LONGVIEW FIBRE COMPANY
OAKLAND CALIFORNIA

- o Drain and flush all connecting pipes into Tanks T-1 and T-2.
- o Pump out and dispose of the contents of the Tanks T-1 and T-2.
- o Clean Tanks T-1 and T-2 in place with high pressure water degreasing solution, and rinse.
- o Collect sample of rinseate from both Tanks T-1 and T-2 for analysis.
- o Prepare hazardous waste manifest form and transport tank contents and rinse water for disposal.
- o Contact Oakland Fire Department and Alameda County Environmental Health Department 24 hours prior to tank removal.
- o Disconnect all pipes to T-1 and T-2.
- o Excavate and remove Tanks T-1 and T-2 and hold tanks onsite until rinseate results have been received. If rinseate results indicate less than 100 ppm petroleum hydrocarbons tanks will be transported as scrap material rather than as hazardous material.
- o Visually inspect tanks and excavations for any evidence of leaks or corrosion. Take soil samples at either end of each tank. Additional samples will be collected from areas where suspected leaks have occurred (stained soil, etc.).
- o Samples will be delivered to Groundwater Technology Environmental labs. Samples will be analyzed for Total Petroleum Hydrocarbons (TPH) (high boiling point) and TPH (low boiling point) according to the Guidelines for Addressing Fuel Leaks, California Regional Water Quality Control Board, San Francisco Bay Region. Verbal results will be received in approximately 48 hours.
- o Backfill the excavations with clean backfill material.
- o If contamination is found, the Regional Water Quality Control Board may require a Remedial Action Plan.
- o Locate diesel tank T-3 and gasoline tank T-4.

- o Decide whether to remove T-3 and T-4 or abandon in place.
- o Prepare protection plan for removal of tank T-3 to avoid damage to surrounding structures.
- o Drain and flush all connecting pipes into the tanks.
- o Disconnect all pipes except the fill lines.
- o Pump out and dispose of the contents of the tanks; prepare hazardous waste manifests.
- o Contact Oakland Fire Department and Alameda County Environmental Health Department 24 hours prior to tank removal.
- o Contractor will purge vapors or clean tanks in place and remove tanks.
- o Inspect tanks and excavations for any evidence of leaks or corrosion. Take soil samples at either end of each tank. Additional samples will be collected from areas where suspected leaks have occurred (stained soil, etc.).
- o Contractor will clean, remove, transport and dispose of the tanks.
- o Samples will be delivered to Groundwater Technology Laboratory for analysis. Samples will be analyzed for Total Petroleum Hydrocarbons (high boiling point) and Total Petroleum Hydrocarbons (low boiling point) according to the RWQCB Guidelines for Addressing Fuel Leaks. Verbal results will be received in approximately 24 hours.
- o Backfill the excavations with clean backfill material.
- o If contamination is found, the Regional Water Quality Control Board may require a Remedial Action Plan.
- o Empty and steam clean sump
- o Use jackhammer to break a hole in the bottom of the sump. Sample soil under sump for analyses for Total Petroleum Hydrocarbons (TPH) and heavy metals as required by Ariu Levi/Alameda County Environmental Health Department
- o If analytical results indicate contamination levels of less than 1,000 ppm TPH or heavy metal concentrations below the TTLC levels set in the California Administrative Code, Title 22, Division 4, the sump will be back-filled with sand and then capped with concrete

- o Prepare a final closure report including field notes, photographs, copies of hazardous waste manifests, chain of custody forms and copy of lab results.

Please print or type. (Form designed for use on elite (12-pitch typewriter).)

LET-2015

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. **09A0018V18443331451912**
 Manifest Document No.

2. Page 1 of 1
 Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
LONGVIEW FIBRE COMPANY ATTN: MR. WORTH CORNELIUS
8511 BLAINE AVE
OAKLAND, CA 94621
 4. Generator's Phone **(415) 569-2616**

A. State Manifest Document Number
87434592
 B. State Generator's ID

5. Transporter 1 Company Name
H H SHIP SERVICE
 6. US EPA ID Number **10A1001047711565**

C. State Transporter's ID **800846**
 D. Transporter's Phone **(415) 543-4825**

7. Transporter 2 Company Name
 8. US EPA ID Number

E. State Transporter's ID
 F. Transporter's Phone

9. Designated Facility Name and Site Address
H H SHIP SERVICE
220 CHINA BASIN ST
SAN FRANCISCO, CA 94107
 10. US EPA ID Number **10A100104771116104151543-4835**

G. State Facility's ID
381-1001-178
 H. Facility's Phone

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.
				State 135 EPA/Other Capillary
				State EPA/Other
				State EPA/Other
				State EPA/Other

a. **HAZARDOUS WASTE LIQUID N.O.S.**
N/A 9189
ORM-E

12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | 15. Waste No.

b.

12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | 15. Waste No.

c.

12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | 15. Waste No.

d.

12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | 15. Waste No.

J. Additional Descriptions for Materials Listed Above
WATER - 99%
DIESEL - 5%
CRS - 5%

K. Handling Codes for Wastes Listed Above
 a. | b. | c. | d.

15. Special Handling Instructions and Additional Information
GLOVES

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
 If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name
CARL BURCH

Signature

 Month Day Year
10/1/2018

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name
DANIEL GERSON

Signature

 Month Day Year
10/1/2018

18. Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name

Signature
 Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
 Printed/Typed Name
 Signature
 Month Day Year

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802 WITHIN CALIFORNIA CALL 1-800-952-7550

GENERATOR

TRANSPORTER

FACILITY

Please print or type (Form designed for use on elite (12-pitch typewriter))

UNIFORM HAZARDOUS WASTE MANIFEST		1 Generator's US EPA ID No C1A1D1010912844B13		Manifest Document No		2. Page 1 of 1		Information in the shaded area is not required by Federal law							
3 Generator's Name and Mailing Address Longview Fibre Co. 8511 Blaine Ave., Oakland, CA. 94621						A State Manifest Document Number 87611868									
4 Generator's Phone (415) 569-2616						B State Generator's ID									
5 Transporter 1 Company Name				6 US EPA ID Number		C State Transporter's ID 809156									
7 Transporter 2 Company Name				8 US EPA ID Number		D Transporter's Phone (805) 937-8449									
9 Designated Facility Name and Site Address				10 US EPA ID Number		E State Transporter's ID									
G State Facility's ID CADD020748125						F Transporter's Phone									
H Facility's Phone (805) 937-8449															
11 US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)						12 Containers No Type		13 Total Quantity		14 Unit Wt/Vol		1 Waste No.			
a Waste diesel contaminated soil, California Regulated Waste Only						10 1 D T		010016		Y		State 611 EPA/Other Non RCRA			
b												State EPA/Other			
c												State EPA/Other			
d												State EPA/Other			
J Additional Descriptions for Materials Listed Above Diesel 1% Soil 99%						K Handling Codes for Wastes Listed Above a. 03 b. c. d.									
15 Special Handling Instructions and Additional Information wear protective clothing, gloves and goggles															
16 GENERATOR'S CERTIFICATION. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford															
Printed/Typed Name CARL BURCH						Signature Carl Burch						Month Day Year 10/12/88			
17 Transporter 1 Acknowledgement of Receipt of Materials						Printed/Typed Name RANDY S. LIMON						Signature Randy S. Limon		Month Day Year 10/12/88	
18 Transporter 2 Acknowledgement of Receipt of Materials						Printed/Typed Name						Signature		Month Day Year	
19 Discrepancy Indication Space															
20 Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19															
Printed/Typed Name Sherry Mobley						Signature Sherry Mobley						Month Day Year 10/12/88			

GENERATOR

TRANSPORTER

FACILITY

RECEIVED 10/12/88

Please print or type (Form designed for use on elite (12-pitch typewriter))

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-9302. WITHIN CALIFORNIA CALL 1-800-852-7550

GENERATOR

FACILITY

UNIFORM HAZARDOUS WASTE MANIFEST		1 Generator's US EPA ID No <i>CA 11 02 07 48 1 2 5</i>		Manifest Document No <i>CA 11 02 07 48 1 2 5</i>		2 Page 1 of 1		Information in the shaded areas is not required by Federal law							
3 Generator's Name and Mailing Address <i>Casmalia Fibers Co 2541 Blaine Ave Oakland CA 94621</i>						A State Manifest Document Number <i>805729</i>									
4 Generator's Phone <i>(415) 501-2442</i>						B State Generator's ID									
5 Transporter 1 Company Name			6 US EPA ID Number			C State Transporter's ID									
7 Transporter 1 Company Name <i>Casmalia Resources</i>			6 US EPA ID Number <i>CA 11 02 07 48 1 2 5</i>			D Transporter's Phone									
9 Designated Facility Name and Site Address <i>Casmalia Resources NTU Road Casmalia, CA 93429</i>						G State Facility's ID <i>CA 11 02 07 48 1 2 5</i>									
10 US EPA ID Number <i>CA 11 02 07 48 1 2 5</i>						H Facility's Phone <i>(805) 937-8449</i>									
11 US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)						12 Containers		13 Total Quantity		14 Unit		1 Waste No			
						No		Type		Wt		Vol		State	
a ... <i>(Diesel Contaminated Soil)</i>						0011		0110001181		11		State CA		EPA/Other NA	
												State <i>611</i>		EPA/Other <i>NA</i>	
b <i>California regulated waste only</i>												State		EPA/Other	
												State		EPA/Other	
c												State		EPA/Other	
												State		EPA/Other	
d												State		EPA/Other	
												State		EPA/Other	
J. Additional Descriptions for Materials Listed Above <i>Diesel 10% Soil 99%</i>						K. Handling Codes for Wastes Listed Above a. <i>03</i> b. <i>03</i> c. d.									
15. Special Handling Instructions and Additional Information <i>wear protective clothing, gloves and goggles</i>															
16 GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford															
Printed/Typed Name <i>CARL BURCH</i>				Signature <i>Carl Burch</i>				Month Day Year <i>10/1/88</i>							
17. Transporter 1 Acknowledgement of Receipt of Materials				Printed/Typed Name <i>Michael D. Norling</i>				Signature <i>Michael D. Norling</i>		Month Day Year <i>01/1/88</i>					
18 Transporter 2 Acknowledgement of Receipt of Materials				Printed/Typed Name				Signature		Month Day Year					
19 Discrepancy Indication Space															
20 Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19															
Printed/Typed Name <i>Sherry L. Mobley</i>				Signature <i>Sherry L. Mobley</i>				Month Day Year <i>01/1/88</i>							
Facility Name <i>Casmalia Resources</i>															

Please print or type (Form designed for use on elite (12-pitch typewriter))

UNIFORM HAZARDOUS WASTE MANIFEST		1 Generator's US EPA ID No KNDK0591189432	Manifest Document No C10CK13	2 Page 1 1 of	Information in the shaded areas is not required by Federal law
3 Generator's Name and Mailing Address Longview Fibre Co. 8511 Braine Ave Salem, OR 97301			A State Manifest Document Number 87219740		
4 Generator's Phone (503) 554-2500			B State Generator's ID		
5 Transporter 1 Company Name Casmalia Resources		6 US EPA ID Number CA10020748125	C State Transporter's ID 808905		
7 Transporter 2 Company Name Casmalia Resources		8 US EPA ID Number CA10020748125	D Transporter's Phone (805) 937-8449		
9 Designated Facility Name and Site Address Casmalia Resources NTU Road Casmalia, CA 93429			E State Transporter's ID		
			F Transporter's Phone (805) 937-8449		
			G State Facility's ID CA020748125		
			H Facility's Phone (805) 937-8449		

11 US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12 Containers		13 Total Quantity	14 Unit Wt./Vol	15 Waste No
	No	Type			
a Hazardous liquid cont. Alk. No. 9189	0011	DR	1	Y	State 611 EPA/Other 0009
b (base contaminated soil) California regulated waste only	0101	DR	1	Y	State NA EPA/Other
c					State EPA/Other
d					State EPA/Other

J Additional Descriptions for Materials Listed Above Diesel 1% Soil 99%	K. Handling Codes for Wastes Listed Above	
	a 376	b 03
	c	d

15 Special Handling Instructions and Additional Information
 wear protective clothing, gloves and goggles

16 GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
 If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment, OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford

Printed/Typed Name CARL BURCH	Signature Carl Burch	Month Day Year 01/14/85
17 Transporter 1 Acknowledgement of Receipt of Materials		
Printed/Typed Name William Buchanan	Signature William Buchanan	Month Day Year 01/14/85
18 Transporter 2 Acknowledgement of Receipt of Materials		
Printed/Typed Name	Signature	Month Day Year

19 Discrepancy Indication Space

20 Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19		
Printed/Typed Name Sherry L. Mobley Casmalia Resources	Signature Carol Johnston	Month Day Year 01/14/85

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802 WITHIN CALIFORNIA CALL 1-800-527-0800

Please print or type (Form designed for use on elite (12-pitch typewriter))

UNIFORM HAZARDOUS WASTE MANIFEST		1 Generator's US EPA ID No. CA1D101091184432	Manifest Document No. 1012	2 Page 1 of	Information in the shaded areas is not required by Federal law.
3 Generator's Name and Mailing Address Longview Fibre Co 551 Elaine Ave Oakland CA 94621				A State Manifest Document Number 87212739	
4 Generator's Phone (415) 549 2616				B. State Generator's ID	
5 Transporter 1 Company Name JAMES R. CROOKS		6 US EPA ID Number CA0981404015		C State Transporter's ID 809297	
7 Transporter 2 Company Name Casmalia Resources		8 US EPA ID Number CA110210748125		D. Transporter's Phone 805) 4817806	
9. Designated Facility Name and Site Address Casmalia Resources NTU Road Casmalia, CA 93429				E State Transporter's ID	
				F Transporter's Phone (805) 937-8449	
				G State Facility's ID CA110210748125	
				H Facility's Phone (805) 937-8449	

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12 Containers		13 Total Quantity	14 Unit Wt/Vol	1. Waste No.
	No	Type			
a. 7CS- Diesel contaminated soil					State 611 EPA/Other Doot
b. (Diesel contaminated soil) California regulated waste only	0102	0102	0102	Y	State 611 EPA/Other NA
c.					State EPA/Other
d.					State EPA/Other
J. Additional Descriptions for Materials Listed Above Diesel 1% Soil 99%				K. Handling Codes for Wastes Listed Above a. 032 b. 03	

15. Special Handling Instructions and Additional Information
 wear protective clothing, gloves and goggles

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
 If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford

Printed/Typed Name: CARL BURCH Signature: Carl Burch Month Day Year: 10/1/1988

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name: JAMES R. CROOKS Signature: James R. Crooks Month Day Year: 10/1/1988

18. Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name: Signature: Month Day Year:

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
 Printed/Typed Name: Sherry L. Mobley Signature: Sherry L. Mobley #100465-43,780/165 Month Day Year: 10/1/1988
 Casmalia Resources

EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802 WITHIN CALIFORNIA CALL 1-800-852-7550

BM # 3244

UNIFORM HAZARDOUS WASTE MANIFEST		1 Generator's US EPA ID No CA 02107481P5	Manifest Document No CA 02107481P5	2 Page 1 of 1	Information in the shaded areas is not required by Federal law
3. Generator's Name and Mailing Address Casmalia Resources NTU Road Casmalia, CA 93429			A State Manifest Document Number 8722137		
4 Generator's Phone (415) 442-4421			B State Generator's ID		
5 Transporter 1 Company Name Casmalia Resources		6 US EPA ID Number CA 02107481P5	C State Transporter's ID 808930		
7 Transporter 2 Company Name		8 US EPA ID Number	D Transporter's Phone		
9 Designated Facility Name and Site Address Casmalia Resources NTU Road Casmalia, CA 93429		10 US EPA ID Number CA 02107481P5	E State Transporter's ID 808930		
			F Transporter's Phone (805) 937-8449		
			G State Facility's ID CA 02107481P5		
			H Facility's Phone (805) 937-8449		

11 US DOT Description (Including Proper Shipping Name Hazard Class and ID Number)	12 Containers		13 Total Quantity	14 Unit Wt/Vol	1. Waste No
	No	Type			
a Z.C.C. Hazardous waste soil Nos. NA 4189 (Diesel contaminated soil) California - transport only	02	11 VIL	11	Y	State 611 EPA/Other D001
b	02	11 DT	11		State 611 EPA/Other NA
c					State EPA/Other
d					State EPA/Other
J Additional Descriptions for Materials Listed Above Diesel 1% Soil 99%					K. Handling Codes for Wastes Listed Above a. 032 b. 03 c. d.

15. Special Handling Instructions and Additional Information
 wear protective clothing, gloves and goggles

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations
 If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment, OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford

Printed/Typed Name: Carl Burch
 Signature: Carl Burch
 Month Day Year: 10/11/1988

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name: ~~Randy S. Linton~~
 Signature: ~~Randy S. Linton~~
 Month Day Year: _____

18. Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name: RANDY S. LINTON
 Signature: Randy S. Linton
 Month Day Year: 10/11/1988

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
 Printed/Typed Name: Sherry L. Mobley
 Signature: Sherry Mobley
 Month Day Year: 10/11/1988

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER, 1-800-424-9092. WHEN CALLED, WE WILL ASSIST YOU.

Please print or type (Form designed for use on elite (12 pitch typewriter))

UNIFORM HAZARDOUS WASTE MANIFEST

1 Generator's US EPA ID No
 CA1000191151472300005

2 Page 1 of 1

Information in the shaded areas is not required by Federal law

3 Generator's Name and Mailing Address
 Casmalia Fibre Co
 854 Buena Ave
 Casmalia, CA 94429

A State Manifest Document Number
 8721273E

B State Generator's ID

4 Generator's Phone (415) 564-2114

C State Transporter's ID
 805300

D Transporter's Phone
 805-937-8449

5 Transporter 1 Company Name
 Casmalia Resources CA 14 02 07 48 1 2 5

E State Transporter's ID
 805300

F Transporter's Phone
 (805) 937-8449

7 Transporter 2 Company Name

9 Designated Facility Name and Site Address
 Casmalia Resources
 NTU Road
 Casmalia, CA 93429 CA 14 02 07 48 1 2 5

G State Facility's ID
 CA10020748125

H Facility's Phone
 (805) 937-8449

11 US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12 Containers No	13 Total Quantity	14 Unit	15 Waste No
Heavy metal salt waste				State 611 EPA/Other 0001
(Diesel Contaminated Soil)				State 611 EPA/Other NA
California regulated waste only	010110100020			State EPA/Other
				State EPA/Other

J. Additional Descriptions for Materials Listed Above
 Diesel 1%
 Soil 99%

K Handling Codes for Wastes Listed Above
 a 37E b 03
 c. d.

15. Special Handling Instructions and Additional Information
 wear protective clothing, gloves and goggles

16 GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations
 If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment, OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford

Printed/Typed Name Signature Month Day Year
 CARL BURCH Carl Burch 01/11/88

17 Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name Signature Month Day Year
 MARK D. WALLER Mark D Waller 01/11/88

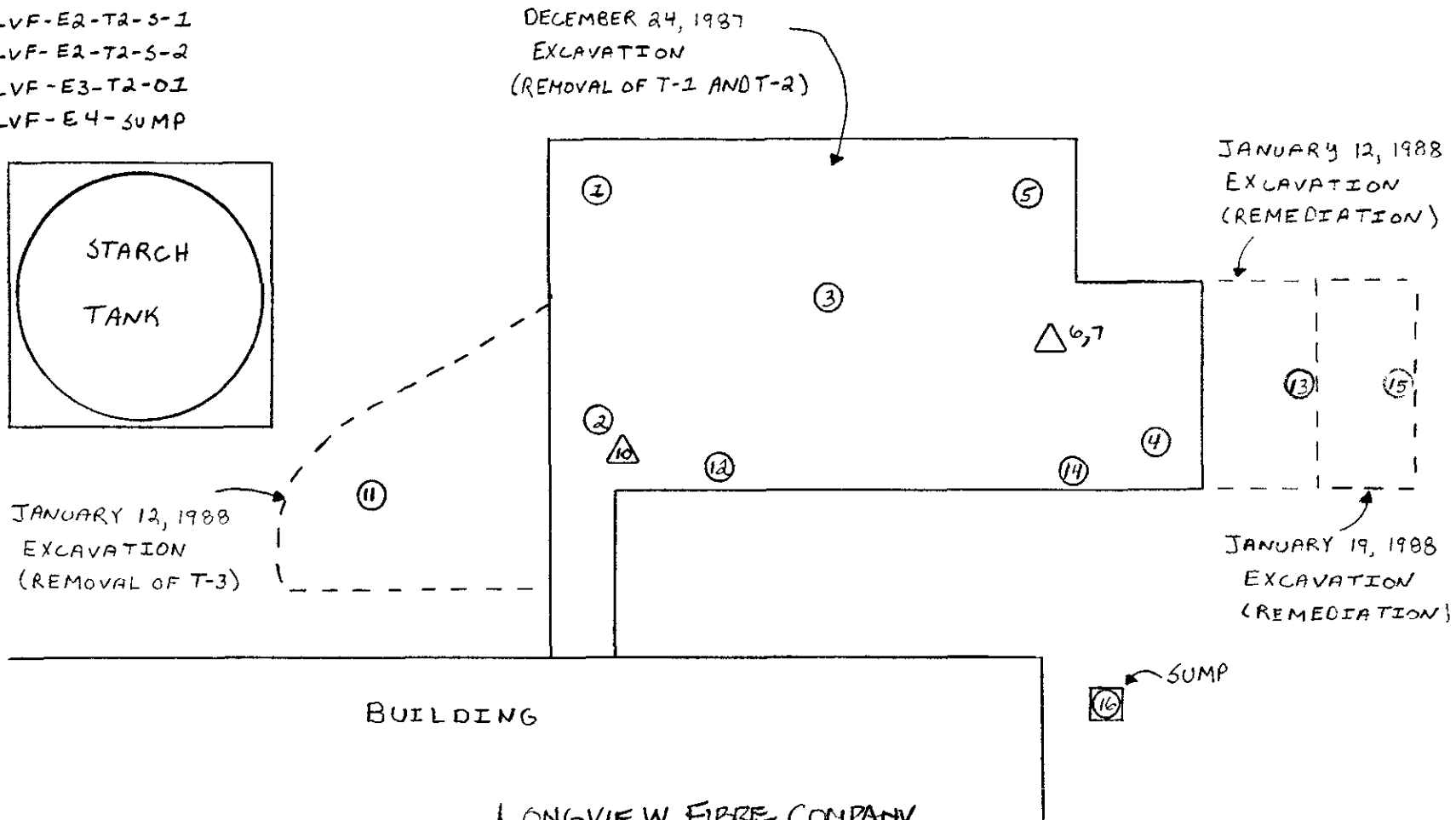
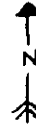
18 Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name Signature Month Day Year
 MARK D. WALLER Mark D Waller 01/11/88

19 Discrepancy Indication Space

20 Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
 Printed/Typed Name Signature Month Day Year
 Sherry L. Mobley Sherry L Mobley 10/15/88

GENERATOR
 TRANSPORTER
 FACILITY

1. LVF-SS-1
2. LVF-SS-2
3. LVF-SS-3
4. LVF-SS-4
5. LVF-SS-5
6. LVF-GW-3
7. LVF-GW-4
10. LVF-E2-T3-GW-1
11. LVF-E2-T3-S-1
12. LVF-E2-T3-S-2
13. LVF-E2-T2-S-1
14. LVF-E2-T2-S-2
15. LVF-E3-T2-D1
16. LVF-E4-SUMP



LONGVIEW FIBRE COMPANY
 OAKLAND CALIFORNIA
 SAMPLE LOCATIONS
 (TANKS T-1, T-2 & T-3)

DATE

SHEET OF

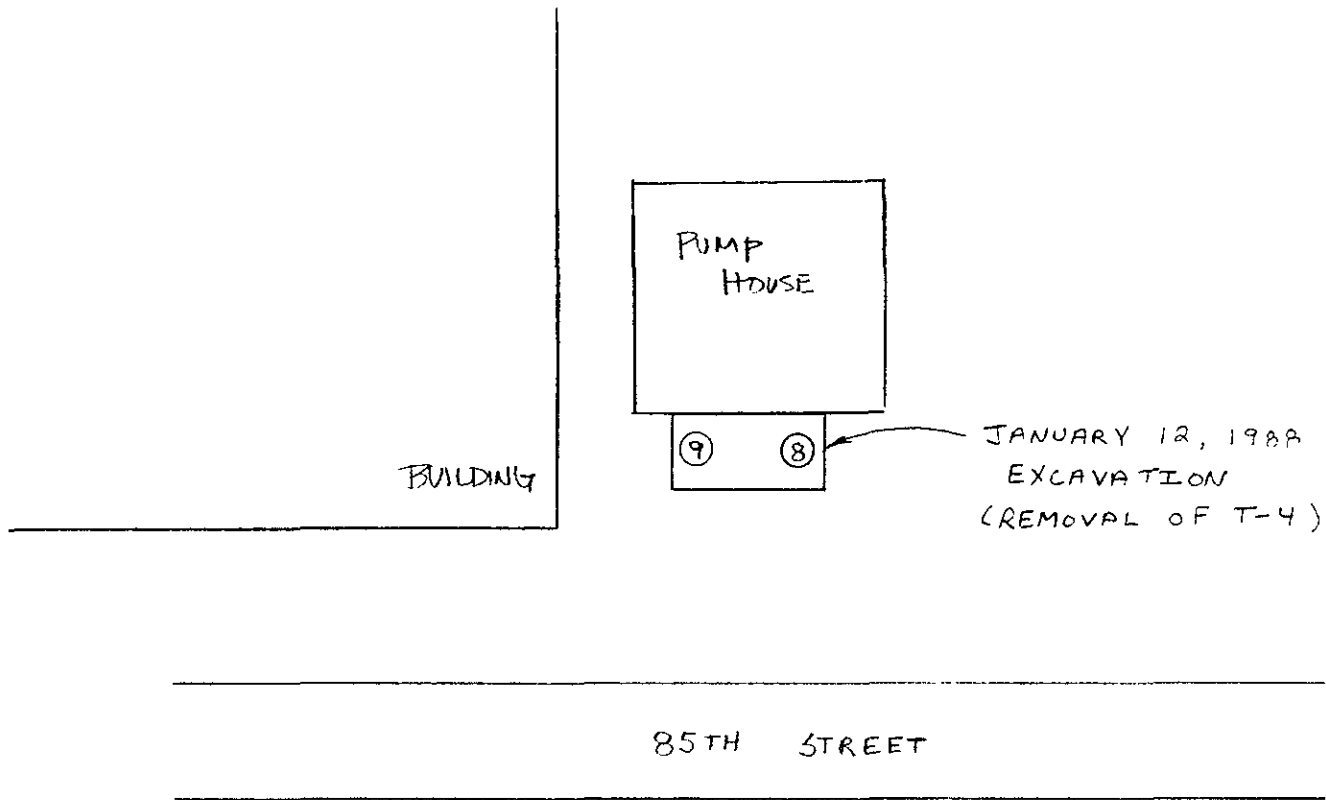
PROJECT NO

SUBJECT



8. LVF-E2-T4-S-1

9. LVF-E2-T4-S-2



LONGVIEW FIBRE COMPANY
OAKLAND CALIFORNIA

SAMPLE LOCATIONS
(TANK T-4)

DATE

BY

SUBJECT

SUBJECT



LONGVIEW FIBRE COMPANY
OAKLAND, CALIFORNIA
SAMPLE ANALYTICAL RESULTS

Sample I.D.	Date	Type	Location	Analysis	Results (ppm)
LVF-SS-1	12/24/87	Soil	West end of T-1	TPH*, Diesel	3
LVF-SS-2	12/24/87	Soil	West end of T-2	TPH, Diesel	1,000
LVF-SS-3	12/24/87	Soil	Between Tanks T-1 and T-2	TPH, Diesel	439
LVF-SS-4	12/24/87	Soil	East end of T-2	TPH, Diesel	4,900
LVF-SS-5	12/24/87	Soil	East end of T-1	TPH, Diesel	52
LVF-STOCKPILE-1	12/24/87	Soil	Stockpile excavated/T-1 and T-2	TPH, Diesel	1,200
LVF-STOCKPILE-2		Composited with LVF-Stockpile 1			
LVF-GW-1	12/24/87	Groundwater	T-1/T-2 excavation, VOA	Not analyzed	--
LVF-GW-2	12/24/87	Groundwater	T-1/T-2 excavation, VOA	Not analyzed	--
LVF-GW-3	12/24/87	Groundwater	T-1/T-2 excavation, 2-1/2 litre	TPH, Diesel	160,000
LVF-GW-4	12/24/87	Groundwater	T-1/T-2 excavation, 2-1/2 litre	TPH, Diesel	80,000
LVF-E2-T4-S-1	01/12/88	Soil	Under fill pipe location on T-4	TPH, Gasoline	<5
LVF-E2-T4-S-2	01/12/88	Soil	Under supply pipe location on T-4	TPH, Gasoline	<5
LVF-E2-T3-GW-1	01/12/88	Groundwater	T-3 excavation, 2-1/2 litre	TPH, Diesel	170,000
LVF-E2-T3-S-1	01/13/88	Soil	Wall at west end of T-3	TPH, Diesel	<5
LVF-E2-T3-S-2	01/13/88	Soil	South wall at east end of T-3	TPH, Diesel	210
LVF-E2-T2-S-1	01/13/88	Soil	Excavated southeast wall	TPH, Diesel	1,600
LVF-E2-T2-S-2	01/13/88	Soil	South wall at east end of T-3	TPH, Diesel	96
LVF-E2-STOCKPILE-1	01/13/88	Soil	Stockpile excavated/T-3	TPH, Diesel	<5
LVF-E2-STOCKPILE-2	01/13/88	Soil	Stockpile excavated/T-3	TPH, Diesel	<5
LVF-E3-T2-01	01/19/88	Soil	Excavated southeast wall	TPH, Diesel	<5
LVF-E4-SUMP	01/20/88	Soil	Under sump	TPH, Diesel	<5
				Heavy metals	Below TTLCs

*Total Petroleum Hydrocarbon



A division of Groundwater Technology, Inc.

12-30-87 MH

Page 1 of 2

Western Region
4080-C Pike Lane, Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

PROJECT MGR: Forrest Canutt
Reidel Environmental Serv.
4138 Lakeside Drive
Richmond, CA. 94806

PROJECT #: SFB-0129-25
LOCATION: Longview Fibre Co.
SAMPLED: 12/24/87 BY: D. Fischer
RECEIVED: 12/24/87 BY: S. Khalifa
ANALYZED: 0.0057471 BY: R. Craven
MATRIX: Soil
Riedel Project: F24103.A0

TEST RESULTS (ppm)

Table with 4 columns: PARAMETER, MDL, LAB # I, and three I.D. # columns (LVF-SS-1, LVF-SS-2, LVF-SS-3). Row 1: Total Petroleum Hydrocarbons as Diesel, MDL 5, values (5, 1000 *, 440 *).

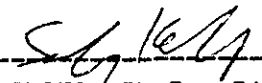
MDL = Method Detection Limit.
METHOD: Modified 8270/3550.
*NOTE: Gasoline range hydrocarbons detected.

Western Region
 4080-C Pike Lane, Concord, CA 94520
 (415) 685-7852
 (800) 544-3422 from inside California
 (800) 423-7143 from outside California

PROJECT MGR: Forrest Canutt
 PROJECT #: SFB-0129-25
 LOCATION: Longview Fibre Co.

TEST RESULTS	(ppm)			
	LAB #	13186	13187	13188
PARAMETER	MDL	I.D.#	LVF-SS-4	LVF-SS-5 LVF-Stk. PI
Total Petroleum Hydrocarbons as Diesel	5		4900 *	52 1200 *

MDL = Method Detection Limit.
 METHODS: Modified 8270/3550.
 *NOTE: Gasoline range hydrocarbons detected.


 SAFY KHALIFA, Ph.D., Director

RECEIVED JAN 11 1988



A division of Groundwater Technology, Inc.

01-07-88 MH

Page 1 of 1

PROJECT MGR: Deanne Fischer
CH2M HILL
6425 Christie Ave., #500
Emeryville, CA 94608

Western Region
4080-C Pike Lane, Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

PROJECT #: SFB-0133-1
LOCATION: Oakland, CA
SAMPLED: 12/23-24/87 BY: D. Fischer
RECEIVED: 12/24/87 BY: S. Khalifa
ANALYZED: 01-06-88 BY: L. Hinson
MATRIX: Water R. Craven
F 24103.A0

TEST RESULTS (ppb)

PARAMETER	MDL	LAB #	13190	13191	
		I.D.#	ILVF-GW-3	ILVF-GW-4	
Total Petroleum Hydrocarbons as Diesel	10		160,000,000	80,000,000	

MDL = Method Detection Limit.
METHOD: Modified 625/3510.

SAFY KHALIFA, Ph.D., Director

RECEIVED

APR 21 1988

Western Region

4080-C Pike Lane, Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

**CH2M-HILL
SAN FRANCISCO**

1-18-88 kb
PROJECT MGR: Deanne Fischer
CH2M HILL
6425 Christia Ave. #500
Emeryville, CA 94608

PROJECT #: SFB-0133-2

SAMPLED: 1-12-88

RECEIVED: 1-13-88

ANALYZED: 1-14-88

MATRIX: Soil


BY: D. Fischer
BY: R. Williams
BY: L. Hinson
R. Craven

F24103.A0

TEST RESULTS

PARAMETER	Units	MDL	LAB #	15601	15602
			I.D.#	T4-S-1	T4-S-2
Total Petroleum Hydrocarbons as Gasoline	ppm	5		<5	<5

MDL = Method Detection Limit.
METHOD: Modified 8270/3550.


SAFY KHALIFA, Ph.D., Director

GT Environmental Laboratories

A division of Groundwater Technology, Inc.

Western Region
4080-C Pike Lane, Concord, CA 94520
(415) 685-7852
(800) 544-3422 *from inside California*
(800) 423-7143 *from outside California*

01-20-88 MH

Page 1 of 1

PROJECT MGR: Deanne Fischer
CH2M Hill
6425 Christia Ave, #500
Emeryville, CA 94608

PROJECT #: SFB-0133-4

SAMPLED: 01-12-88 BY: D. Fischer
RECEIVED: 01-14-88 BY: R. Williams
ANALYZED: 01-18-88 BY: L. Hinson
MATRIX: Water R. Craven
P.O. #: F24103.A0

TEST RESULTS ppb = ug/L

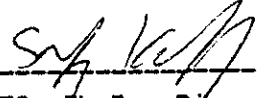
PARAMETER	MDL	LAB #	I.D.#	15604	T3-GW-1
Total Petroleum Hydrocarbons as Diesel	10			170000	

RECEIVED
JAN 22 1988
CH2M-HILL
SAN FRANCISCO

MDL = Method Detection Limit.

METHOD: Modified 625/3510

NOTE: Free Product was visible on sample surface.


SAFY KHALIFA, Ph.D., Director

Western Region
 4080-C Pike Lane, Concord, CA 94520
 (415) 685-7852
 (800) 544-3422 from inside California
 (800) 423-7143 from outside California

1-18-88 kb
 PROJECT MGR: Deanne Fischer
 CH2M HILL
 6425 Christia Ave. #500
 Emeryville, CA 94608

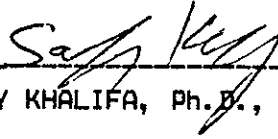
PROJECT #: SFB-0133-5

SAMPLED: 1-12-88 BY: D. Fischer
 RECEIVED: 1-14-88 BY: R. Williams
 ANALYZED: 1-14-88 BY: L. Hinson
 MATRIX: Soil R. Craven
 F24103.A 0

TEST RESULTS (ppm)

PARAMETER	MDL	LAB #	15605	15606	15607	15608
		I.D.#	T3-S-1	T3-S-2	T2-S-1	T2-S-2
Total Petroleum Hydrocarbons as Diesel	5		<5	210	1600	96

MDL = Method Detection Limit.
 METHOD: Modified 8270/3550.


 SAFY KHALIFA, Ph.D., Director

Western Region
4080-C Pike Lane, Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

1-18-88 kb
PROJECT MGR: Deanne Fischer
CH2M HILL
6425 Christia Ave. # 500
Emeryville, CA 94608

PROJECT #: SFB-0133-3
SAMPLED: 1-12-88 BY: D. Fischer
RECEIVED: 1-14-88 BY: R. Williams
ANALYZED: 1-14-88 BY: L. Hinson
MATRIX: Soil R. Craven

TEST RESULTS

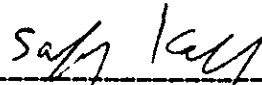
F24103.AD

PARAMETER	Units	MDL	LAB #	15603	15603B
			I.D.#	1STKPILE1,2	STKPILE1 ONLY
Total Petroleum Hydrocarbons as Diesel	ppm	5		<5	<5

MDL = Method Detection Limit.

METHOD: Modified 8270/3550.

Note: Hydrocarbons identified in the range consistent with Gasoline and Diesel in the Stockpile 1 Only sample.


SAFY KHALIFA, Ph.D., Director

RECEIVED

Western Region
 4080-C Pike Lane, Concord, CA 94520
 (415) 685-7852
 (800) 544-3422 from inside California
 (800) 423-7143 from outside California

JAN 25 1988

CH2M-HILL

SAN FRANCISCO

PROJECT MGR: Deanne Fischer
 CH2M HILL
 6425 Christia Ave., #500
 Emeryville, CA 94608

PROJECT #: SFB-0133-6

SAMPLED: 01-19-88 BY: F. Everett
 RECEIVED: 01-19-88 BY: K. Biava
 ANALYZED: 01-19-88 BY: L. Hinson
 MATRIX: Soil

TEST RESULTS ppm = mg/kg F24103.AO

PARAMETER	MDL	LAB #	I.D. #
		15906	ILVFE3T2-01

Total Petroleum
 Hydrocarbons
 as Diesel

5

<5

MDL = Method Detection Limit.
 METHOD: Modified 8270/3550.

Safy Khalifa
 SAFY KHALIFA, Ph.D., Director

Western Region
4080-C Pike Lane, Concord, CA 94520
(415) 685-7852
(800) 544-3422 *from inside California*
(800) 423-7143 *from outside California*

1-20-88 kb
PROJECT MGR: Deanne Fischer
CH2M HILL
6425 Christia Ave. #500
Emeryville, CA 94608

PROJECT #: SFB-0133-7
SAMPLED: 1-20-88 BY: D. Fischer
RECEIVED: 1-20-88 BY: K. Biava
ANALYZED: 1-20-88 BY: R. Craven
MATRIX: Soil L. Hinson
F24103.A0

TEST RESULTS (ppm)

PARAMETER	MDL	LAB #	I.D.#	15979A	I
-----------	-----	-------	-------	--------	---

Total Petroleum Hydrocarbons as Diesel	5			5	
--	---	--	--	---	--

MDL = Method Detection Limit.
METHOD: Modified 8270/3550


SAFY KHALIFA, Ph.D., Director

Western Region
 4080-C Pike Lane, Concord, CA 94520
 (415) 685-7852
 (800) 544-3422 *from inside California*
 (800) 423-7143 *from outside California*

01-22-88 MH

Page 1 of 1

PROJECT MGR: Deanne Fischer
 CH2M HILL
 6425 Christia Ave. #500
 Emeryville, CA 94608

PROJECT #: SFB-0133-8
 SAMPLED: 01-20-88 BY: D. Fischer
 RECEIVED: 01-20-88 BY: K. Biava
 ANALYZED: 01-21-88 BY: P. Voitoff
 MATRIX: Soil
 F24103.A0

TEST RESULTS ppm = mg/kg

COMPOUNDS	MDL	LAB #	15979A
		I.D. #	ILVF E4 SUMP1
Aluminum			
Antimony	0.2		<0.2
Arsenic	1		6
Barium			
Beryllium	0.1		0.3
Cadmium	0.1		<0.1
Chromium	0.1		35
Cobalt			
Copper	0.1		20
Gallium			
Germanium			
Gold			
Iron			
Lead	0.1		22
Lithium			
Magnesium			
Manganese			
Mercury	1		<1
Nickel	0.1		31
Potassium			
Selenium	1		2
Silver	0.1		<0.1
Sodium			
Strontium			
Thallium	0.2		<0.2
Tin			
Tungsten			
Vanadium			
Zinc	0.1		47
Zirconium			

-- = Not Requested. MDL = Method Detection Limit; compound below this level would not be detected.
 METHODS: 3020/6010.

Safy Khalifa
 SAFY KHALIFA, Ph.D., Director

REMEDIAL ACTION PLAN
LONGVIEW FIBRE COMPANY
Oakland, California

- o Consider north area of excavation, where Tank T-1 was installed, to be "clean." Sample results from this area were less than 1,000 ppm.
- o Sample the south wall of the excavation (closest to the building) to determine soil conditions in this area.
- o Expand southern area of the excavation, where tank T-2 was installed, to the east and west. Sample results in this area were above 1,000 ppm. Recommend approximately 5 additional feet to be excavated from either end. If staining of the soil is discovered, continue excavating until there is visually no apparent sign of contamination.
- o Collect new samples at the southwest and southeast walls of the excavation.
- o If sample results indicate Total Petroleum Hydrocarbon (TPH) levels below 1,000 ppm, backfill excavation, and compact and resurface area.
- o If sample results indicate TPH levels above 1,000 ppm, review the situation and, if practical, extend excavation to remove additional "contaminated" soil and sample again.
- o Install monitoring well downgradient of excavation.

PHOTOGRAPHS NOT INCLUDED