



TRINITY TESTING LABORATORIES, INC.

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February 8, 1991

Texas Water Commission
Attn: Mr. Mike Patterson
District 8 Field Office
140 Helmer Road
Suite 360
San Antonio, Texas 78232-5028

Subject: Swift Independent Packing Co., Monfort Industries
Closure Report for Three (3) Underground Storage Tanks
Facility I.D. No. 025533

Dear Mr. Patterson:

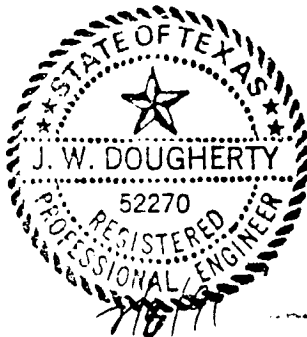
We are pleased to submit this site evaluation report in reference to the removal of three (3) underground storage tanks and contaminated soils at Swift Independent Packing Co., previously on 1901 S. San Marcos, San Antonio, Bexar County, Texas, owned by Monfort Industries, Inc.

The description of the removals, along with the findings, results, analytical reports, and the preliminary recommendations are included.

We appreciate the opportunity to assist you on behalf of Monfort Industries, Inc. with the Site Closure Report of Swift Independent Packing Co. Please give us a call if you have any questions regarding this report or the site.

Sincerely,

TRINITY TESTING LABORATORIES, INC.



W. J. Rich
William J. Rich
Environmental Specialist

John W. Dougherty
John W. Dougherty, P.E.

TABLE OF CONTENTS

Authorization and Scope.....	1
Project Description.....	1,2
Field Testing and Sampling.....	2
Laboratory Testing.....	2,3
Site Conditions.....	3
Description of Activities.....	3,4,5
Preliminary Recommendations.....	5
Results.....	5,6
Disposition of Contaminated Soils.....	5,6
Cause and Amount of Release.....	6
Remediation of the Site.....	6,7
Recommended Placement for Backfill.....	8
General.....	8
Fill Materials.....	8
Placing Fill.....	8
Compaction of Fill.....	8,9
Compaction Testing.....	9,10
Findings.....	10

SITE CLOSURE REPORT
FOR MONFORT INDUSTRIES,
SWIFT INDEPENDENT PACKING CO.
1901 S. SAN MARCOS
SAN ANTONIO, TEXAS
L.P.S.T. I.D. NO. 96936

INTRODUCTION

Authorization and Scope

The site management, testing and reporting was authorized by Mr. J.R. Ramon, Jr. of Ramon & Sons of San Antonio, Texas, on September 13, 1990. J.R. Ramon & Sons are the owner's representative regarding Swift Independent Packing Company.

The purpose of our work was to help manage the removal of the three (3) steel underground storage tanks, manage the removal of the contaminated soils, sampling, analytical and field testing of the spoil and excavation, and the Site Closure Report. All work performed by Trinity Testing Laboratories, Inc. will be according to the Texas Water Commission guidelines.

Project Description

We understand that three (3) steel tanks will be removed, one 1,000 gallon gasoline tank, one 4,000 gallon gasoline tank and one 7,000 gallon diesel tank on the property of Swift Independent Packing Company located at 1901 S. San Marcos, San Antonio, Bexar County, Texas.

We also understand that all of the contaminated soils will be removed above 30 ppm BTEX and/or 100 ppm TPH. The spoil will be placed at the B.F.I. Landfill in San Antonio, Texas.

We also understand if at any time the soil cannot be removed due to structures obstructing the removal of spoil or if groundwater is impacted, the project status will change and the Texas Water Commission will then change the project status from a Level I to a Level II or a Level III (Based upon parameters of contamination).

FIELD AND LABORATORY TESTING

Field Testing and Sampling

Field testing was performed by using a H-Nu photoionization detector. Various samples were taken of the spoil and by using the head space method, the soil was tested during the excavation according to E.P.A. recommendations for UST removals.

Soil samples were taken as requested by the Texas Water Commission with proper QA/QC procedures to provide a representation of the soil being tested. All sampling equipment was sufficiently cleaned and decontaminated between each sample. This was also done according to E.P.A. approved methods. Samples were immediately cooled to 40 Degrees F +/- and brought to the lab to be tested within fourteen (14) days.

Laboratory Testing

Laboratory testing for soil and water were done according to E.P.A. recommendations (GC/PID) Method 8020 with E.P.A. Method 5030 (Purge and Trap.) Also for any water, E.P.A. Method 418.1 Method B (GC/FID) is used. Laboratory reports include the date of collection, date of extraction, date of analysis, report date, the

extraction and analytical methods utilized with notes to any modifications to procedures that are a standard. Also the standard is utilized in the analysis along with the sample I.D. and depths.

SITE CONDITIONS

Site Conditions

The site of Swift Independent Packing Company is located next to the San Antonio stock yards on S. San Marcos off of Highway I-35. The site is located next to an industrial area and a residential area. The soils excavated were a light brown to brown sandy silty clay. Groundwater was encountered at 14'-15'+/-. The site previously was a large pork processing plant known as Swift Independent Packing Company. Presently the plant is being demolished so the property can be sold. The plant has been abandoned for several years along with the underground storage tanks.

DESCRIPTION OF THE REMOVAL OF THE UNDERGROUND STORAGE TANKS AND CONTAMINATED SOIL

Description of Activities

On September 12, 1990, the removal of the underground storage tanks began. Wiking Demolition, a certified UST contractor, began to remove the soil from around two of the underground storage tanks, located on the property of Swift Independent Packing

Company. Present on the site also was the San Antonio Fire Marshall, Joe R. Ramon, Jr., Mike Patterson of the Texas Water Commission and Trinity Testing Laboratory personnel.

Dry ice was placed in both of the tanks, the 1,000 gallon gasoline tank and the 4,000 gallon gasoline tank to bring the LEL to 20% or less. The two (2) tanks were extracted and placed on a trailer and hauled to J.C. PennCo for disposal purposes. Due to the high reading on our hydrocarbon vapor detector, some soil had to be removed by over excavation.

The soil was removed to natural ground on the wall of the excavation. Samples were taken of the walls as directed by the Texas Water Commission and were brought into the laboratory for analysis of BTEX and TPH compounds. The bottom of the 1,000 gallon gasoline tank indicated <1 ppm BTEX and 496 ppm TPH. The soil was over excavated twice and finally indicated <1 ppm BTEX and <10 ppm TPH. This tank cavity was remediated by over excavation.

While excavating one of the concrete underground storage tanks on Site #2, (see Site Plan), a 7,000 gallon diesel tank was discovered. The diesel tank vapors were brought down below 20% LEL and that tank was removed by Wiking Demolition and the tank was hauled to J.C. PennCo for disposal. That tank cavity was over excavated along with the concrete tank cavity after the concrete tank was removed.

Samples were taken of the natural sidewalls and of the bottom of the tank cavity. The northwest tank wall indicated <1.6 ppm BTEX and 140 ppm TPH. The bottom of the excavation on the north side indicated <1.6 ppm BTEX and 530 ppm TPH. The tank cavity was

over excavated and samples were taken again. Samples were retaken of the northwest wall and the north side of the bottom. The sample of the northwest wall indicated <1.6 ppm BTEX and 94 ppm TPH and the sample of the north side bottom was <1.6 ppm BTEX and <10 ppm TPH. The Site #2 tank cavity was remediated by over excavation.

Note: The two (2) concrete tanks will be addressed separately under another report for Swift Independent Packing Company.

After the contaminated soil was removed from the tank cavities, the excavations were backfilled with clean fill sand.

Preliminary Recommendations

Removal of contaminated soils that are 30 ppm BTEX and/or 100 ppm TPH should be removed by over-excavation if possible (Levels described are required by the Texas Water Commission Guidelines and Texas Administrative Codes.) It was our recommendation that the contractor remove the soils above 30 ppm BTEX and/or 100 ppm TPH where possible and/or if it is the most cost effective method for the owner (acceptance based upon the owner or owner's representative decision.)

Results

The contaminated soil was over excavated after several attempts on Site #1 and on Site #2 (See Site Map.) Over excavation was successful in over excavating the contaminated soils on both sites.

Disposition of Contaminated Soils

Contaminated soils were hauled away by J.R. Ramon & Sons to B.F.I.'s landfill in San Antonio, Texas. The spoil was tested at least once for every 400 cubic yards as approved by B.F.I. and the Texas Water Commission District 8 office.

The excavations were sampled prior to the backfilling operation. One 8 metal TCLP test was performed at each excavation on each site.

The spoil was analytically tested for BTEX and TPH prior to disposal. The spoil was manifested and disposed of at the B.F.I. landfill. All tests indicated the spoil was below the Texas Health Department Solid Waste Managements guidelines of 500 ppm BTEX and/or 1,000 ppm TPH.

Note: Tanks were disposed of at PennCo of San Antonio, Texas.

Cause and Amount of Release

According to the visual inspections made by Trinity Testing Laboratories, Inc. personnel and the Texas Water Commission District 8 office, our conclusion is that the underground storage tanks on Site #1, the 1,000 gallon tank and the 4,000 gallon tank were leaking, along with the 7,000 gallon tank located on Site #2 was leaking. It is believed that the underground storage tanks on Site #1 contained leaded and unleaded gasoline and the the steel underground storage tank located on Site #2 contained diesel fuel.

The amount of the releases on Site #1 and Site #2 are unknown. There are no existing records indicating the amount of product

that was lost.

Remediation of the Site

Upon completion of the over excavation method to remediate Site #1 and Site #2, the analytical samples indicated the two (2) sites were successfully remediated. The soil remaining on Site #1 were as follows; the north wall <1 ppm BTEX and 63.3 ppm TPH, the east wall <1.6 ppm BTEX and <10 ppm TPH, the south wall <1 ppm BTEX and <15.6 ppm TPH, the west wall <1 ppm BTEX and <18.7 ppm TPH, and the southeast wall <1.6 ppm BTEX and <17 ppm TPH. The bottom of the excavation on Site #1 indicated <1.8 ppm BTEX and 63 ppm TPH on the east side bottom, and <1.2 BTEX and 70 ppm TPH on the northwest bottom and the bottom directly under the 1,000 gallon tank (#1) was <1.6 ppm BTEX and 80 ppm TPH.

The soils remaining on Site #2 were as follows; the southeast wall <1.6 ppm BTEX and 21 ppm TPH, the southwest wall <1.6 ppm BTEX and 36 ppm TPH, the northwest wall <1.6 ppm BTEX and 94 ppm TPH, the northeast wall <1.6 ppm BTEX and 61 ppm TPH, the tank bed under the 7,000 gallon tank <1 ppm BTEX and 87.5 ppm TPH, the south bottom of the excavation <1.6 ppm BTEX and 33 ppm TPH, and the north half bottom of the excavation <1.6 ppm BTEX and <10 ppm TPH.

All the soils remaining are less than 30 ppm BTEX and/or less than 100 ppm TPH. As indicated by our observations backed up the analytical laboratory results and according to the Texas Water Commission guidelines and the Texas Administrative Codes, Site #1 and Site #2 were cleaned up to acceptable levels.

NOTE: The underground storage tanks have been registered with the Texas Water Commission Underground Storage Tank Registration Division.

RECOMMENDED PLACEMENT FOR BACKFILL

General

The soils engineer shall be the owners representative to control the placement of compacted fill. The soils engineer shall approve the subgrade preparation, the fill materials, the method of placement and compaction, and shall give written approval of the compaction, and shall give written approval of the completed fill.

Fill Materials

Fill shall have a Liquid Limit of 35 or less and Plasticity Index of less than 12. The fill shall contain no organic or other perishable material, and no stones larger than six (6) inches. Fill material shall be approved by the soils engineer.

Placing Fill

Fill material shall be placed in horizontal layers not exceeding eight (8) inches thickness after completion. Successive loads of material shall be dumped so as to secure even distribution, avoiding the formation of layers or lenses of dissimilar materials. The contractor shall route his hauling equipment to distribute travel evenly over the fill area.

Compaction of Fill

a. Moisture Control: The moisture content of the fill material shall be distributed uniformly throughout each layer of the material. The allowable range of moisture content during compaction shall be within plus two (+2) and minus three (-3) percentage points of the optimum moisture content. The contractor may be directed to add necessary moisture to the material either in the borrow area or upon the fill surface or to dry the material, as directed by the soils engineer. The drying of cohesive soils between lifts to moisture contents less than seventy percent (70%) of optimum before the placement of subsequent lifts shall be avoided or the fill reworked at the proper moisture content.

b. Compaction: The material in each layer shall be compacted to obtain proper densities. Compaction by the hauling equipment alone will not be considered sufficient. Structural fill, including pavement subgrade, subbase and base, shall be compacted to ninety percent (90%) of the proctor (Method TEX 113E).

Compaction Testing

Field density tests for the determination of the compaction of

the fill shall be performed by a qualified testing laboratory in accordance with recognized procedures for making such tests. A representative number of tests shall be made in each compacted lift at locations selected by the soils engineer, or his representative, with the request and approval of the owner.

FINDINGS

Our professional services have been performed with accepted environmental engineering principles and practices recommended by the Society of Ground Water Scientist and Engineers. Our findings are based upon the information obtained on the site and from the owner, the site contractor, the City of San Antonio, Bexar County, and the Texas Water Commission. No other warranty, expressed or implied is made.