twin city testing corporation
662 CROMWELL AVENUE
ST. PAUL, MN 55114
PHONE 612/645-3601

FACSIMILE COVER SHEET

THIS MESSAGE IS TO:

Don Milless
Name

MPCA Tanks & Spills
Company/Branch

297-8676
Fax Number

Phone Number

THIS MESSAGE IS FROM:

Kevin Pierson
Name

2-10-92
Date

659-7515
Fax Number

659-7587
Phone Number

MESSAGE:

#4981

Don,

Please review the following work plan, If it is OK please sign it and FAX it back to me. The client wants to begin work ASAP.

Thank you,

Kevin

This message includes this cover sheet and _____ additional page(s). Please contact us if you do not receive all of th
indicated.

twin city testing
corporation

662 CROMWELL AVENUE
ST. PAUL, MN 55114
PHONE 612/645-3601

February 7, 1992

Mr. Charles Bohrer
Normandale Properties Incorporated
Suite 678 International Plaza
Bloomington, MN 55425

Dear Mr. Bohrer,

#4981

Subject: Product Recovery Work Plan
International Plaza
TCT Project #4231 92-630

1.0 INTRODUCTION

Twin City Testing Corporation (TCT) has prepared the following work plan to recover hydraulic oil that has leaked from an elevator system at the International Plaza site. The oil leaked into an elevator well. The well has a total depth of 50 feet with approximately 3.5 feet of sediment in the bottom. The well is cased with 20 inch diameter steel casing but is open on the bottom. Approximately 30 gallons of hydraulic oil was reportedly released into the well. Given the casing diameter, there should be approximately 2 feet of oil on the water surface.

Two representatives of TCT conducted an initial site assessment on February 3, 1992. A transparent bailer was used to assess the product thickness. There was 0.8 feet of product at the surface and a 1.2 foot zone of an apparent oil/water mix. The fluid level was 5.15 feet below the top of casing. Jerry Stangret of Midwest Drilling , the well installer, assured us that substantial pumping of the well would result in little drop in the water level.

A MSDS sheet for the oil is attached. The oil is listed as non-hazardous. It is defined as a solvent-dewaxed heavy paraffinic petroleum distillate. The specific gravity is listed as 0.87 so it should all be floating on the water surface. The solubility was not listed.

2.0 WORK PLAN

TCT recommends that the following tasks be conducted to remove the free product, assess potential groundwater impacts, and treat the groundwater, if necessary.

Task 1 - Development of a work plan.

Task 2 - Product removal.

Task 3 - Groundwater Quality assessment.

Task 4 - Groundwater treatment.

Task 5 - Post Treatment water quality assessment.

Task 6 - Reporting.

3.0 METHODOLOGY

Task 1 - Work Plan

This work plan will serve as the guidance document for the tasks necessary to complete the assessment.

Task 2 - Product Removal

TCT has located a licensed waste oil hauler that has agreed to come out and pump off the upper 60 gallons of fluid from the well and properly dispose of it for $575.00. A TCT technician would be present on site to document all product removal activities.

Task 3 - Groundwater Quality Assessment

Once the product has been removed the TCT technician will collect a sample of the water in the well to assess its suitability for discharge to the storm sewer system. The sample will be collected using a laboratory cleaned bailer but the well will not be purged prior to sampling. Once the water sample has been collected, it will be placed in a cooler for transport to the TCT laboratory for analyses. The samples will be logged in and a chain of custody form completed. The sample will analyzed for total petroleum hydrocarbons as fuel oil (THFO), benzene, toluene, ethylbenzene, and xylenes (BTEX).

Task 4 -Groundwater Treatment

If BTEX analytical results indicate concentrations in excess of the Minnesota Department of Health (MDH) Recommended Allowable Limits (RALs) then an emergency discharge permit will be applied for. If granted, approximately 3 well volumes will be purged into the storm sewer system and the well resampled. If the analytical results indicate potential hydrocarbon concentrations at a level acceptable to the Minnesota Pollution Control Agency (MPCA), then no further action will be recommended and the results will be forwarded to the MPCA for approval to close the site.

Task 5 - Reporting

All results associated with the study will be incorporated into a letter report that will present data generated from site activities and chemical analyses. Recommendations will also be provided for future actions if necessary.

5.0 PERFORMANCE SCHEDULE

The product will be removed and the first sample collected within one week of receiving written MPCA approval of this work plan. A one week rush will be designated for chemistry turnaround. If well purging is necessary, it will be completed within two days of obtaining the required permits to discharge the water. A one week turnaround will again be specified for the analytical results. A written report will be generated within three days of receiving the final chemistry report. The project should be completed in under one month total time.

TCT appreciates the opportunity to have prepared this work plan for Normandale Properties and looks forward working with you in completing the proposed scope of work.

Very truly yours,

Kevin Pierson

Kevin Pierson
Hydrogeologist/Senior Project Manager

MPCA approval of this workplan: _____
Don Milless,
Site Project Manager

KP

Enclosures

TEXACO INC.

INDUSTRIAL HYGIENE, TOXICOLOGY, AND MATERIAL SAFETY DATA SHEET

NOTE: NO REPRESENTATION IS MADE AS TO THE ACCURACY OF THE INFORMATION HEREIN. SEE PAGE 7 FOR CONDITIONS UNDER WHICH DATA ARE FURNISHED.

Trade Name and Synonyms: 01657 RANDO OIL HD 32	Otis Oil #36
Manufacturer's Name: Texaco Inc.	Emergency Telephone No.: (914) 831-3400 ext. 204
Address: P.O. Box 509 Beacon, NY 12508	
Chemical Name and/or Family or Description: Hydraulic Oils	
THIS PRODUCT IS CLASSIFIED AS:	X NOT HAZARDOUS:
____ HAZARDOUS BY DEFINITION NO.(S)	ON ATTACHED EXPLANATION SHEETS

WARNING STATEMENT:
NONE CONSIDERED NECESSARY

OCCUPATIONAL CONTROL PROCEDURES

Protective Equipment (Type)

Eyes:	Chemical type goggles or face shield optional.
Skin:	Exposed employes should exercise reasonable personal cleanliness; this includes cleansing exposed skin areas several times daily with soap and water, and laundering or dry cleaning soiled work clothing at least weekly.
Inhalation:	None required if exposures are within permissible concentrations; see below.
Ventilation:	Adequate to meet permissible concentrations.

Permissible Concentrations:

Air:	5 mg/cubic meter of air for mineral oil mist averaged over an 8 hour daily exposure (ACGIH, 1985-86).

EMERGENCY AND FIRST AID PROCEDURES

First Aid

Eyes:	As with most foreign materials, should eye contact occur, flush eyes with plenty of water.
Skin:	Wash exposed areas with soap and water.
Ingestion:	None considered necessary.
Inhalation:	None considered necessary.
Other Instructions:	None.

N.D. = Not Determined N.A. = Not Applicable
< = Less Than > = Greater Than

PHYSIOLOGICAL EFFECTS:

Code No. 01657

Effects of Exposure

Acute:

Eyes: Causes minimal eye irritation. Transient minor irritation may be noted following initial contact.

Skin: Slightly irritating with possible redness, edema, or drying of the skin.

Respiratory System: Believed to be minimally irritating if not in excess of permissible concentrations; see page 1.

Chronic: N.D.

Other: -

Sensitization Properties:

Skin: Yes ___ No ___ Unknown X Respiratory: Yes ___ No ___ Unknown X

Median Lethal Dose (LD_{50} LC_{50} XSpecies)

Oral: Similar product >22.4g /kg (rat); practically non-toxic

Inhalation: N.D.

Dermal: Similar product >3.0g/kg (rabbit); practically non-toxic

Other: N. D.

Irritation Index, Estimation of Irritation (Species)

Skin: 0.79/8.0 (rabbit); slightly irritating

Eyes: 8/110 (rabbit); no appreciable effect

Symptoms of Exposure: See above.

FIRE PROTECTION INFORMATION

Ignition Temp. °F. N.D. Flash Point °F. (Method) 385 °F (COC)

Flammable Limits (%) Lower N.D. Upper N.D.

Products Evolved When Subjected to Heat or Combustion:

Carbon monoxide, carbon dioxide, and aldehydes and ketones may be formed.

Recommended Fire Extinguishing Agents And Special Procedures:

According to the National Fire Protection Association Guide, use water spray, dry chemical, foam, or carbon dioxide.
Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for persons attempting to stop the leak.

Unusual or Explosive Hazards:

None.

N.D. - Not Determined N.A. - Not Applicable
< - Less Than > - Greater Than

ENVIRONMENTAL PROTECTION

Code No. 0657

Waste Disposal Method:
Under RCRA, it is the responsibility of the user of products to determine, at the time of disposal, whether product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixture, processes, etc. may render the resulting material hazardous. (See Remarks for Waste Classification.)

Procedures in Case of Breakage or Leakage: (Transportation Spills Call CHEMTREC (800) 424-9300)
Contain spill if possible. Wipe up or absorb on suitable material and shovel up.

Remarks:
Waste Classification: Product has been evaluated for RCRA characteristics and does not meet criteria of a hazardous waste if discarded in its purchased form.

PRECAUTIONS

NONE CONSIDERED NECESSARY

Requirements for Transportation, Handling and Storage:
Minimum feasible handling temperatures should be maintained. Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

DOT Proper Shipping Name: N.A.
DOT Hazard Class (if applicable): N.A.

CHEMICAL AND PHYSICAL PROPERTIES

Boiling Point (°F) N.D. Vapor Pressure N.D. (mmHg)

Specific Gravity 0.8681 (H_2O=1) Vapor Density N.D. (Air=1)

Appearance and Odor pale liquid

pH of undiluted product N.D. Solubility N.D.

Percent Volatile by Volume N.D. Evaporation N.D. ( )=1

Viscosity 31.5 cSt @ 40 °C Other -

Hazardous Polymerizations ____ Occur X Do not occur

The Material Reacts Violently With (If others is checked below, see additional comments on page 6 for futher details)

Air	Water	Heat	Strong Oxidizers	Others	None of These
			X		

N.D. = Not Determined N.A. = Not Applicable
< = Less Than > = Greater Than

COMPOSITION

Code No. 01657

Chemical/Common Name	CAS No.	Exposure Limit	Range in %
Solvent-dewaxed heavy paraffinic petroleum distillates	64742650	5 mg/m3 ACGIH (MIST)	95.00 - 99.99

To the best of our knowledge, none of the above listed components is hazardous according to OSHA (1910.1200) or one or more state Right-To-Know lists.

PRODUCT SHIPPING LABEL

Code No. 01657

01657 RANDO OIL HD -32

NONE CONSIDERED NECESSARY

Chemical/Common Name	CAS No.	Range in %
Solvent-dewaxed heavy paraffinic petroleum distillates	64742650	95.00 - 99.99

To the best of our knowledge, none of the above listed components is hazardous according to OSHA (1910.1200) or one or more state Right-To-Know lists.

HMIS

Health : 1 Reactivity : 0
Flammability: 1 Special : -

CAUTION: Misuse of empty containers can be hazardous. Empty containers can be hazardous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers might cause fire, explosion or toxic fumes from residues. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place.

HEALTH EMERGENCY TELEPHONE: (914) 831-3400 (EXT. 204)

Texaco Inc.
2000 Westchester Avenue
White Plains, New York 10650

For Additional Information Concerning:

Fuels/Lubricants/Antifreezes
call (914) 831-3400 (EXT.204)
Chemicals/Additives
call (408) 722-8381
Transportation Spills
call CHEMTREC (800) 424-9300

ADDITIONAL COMMENTS Code No. 01657

TEXACO INTENDS TO COMPLY FULLY WITH PROVISIONS OF THE TOXIC SUBSTANCES CONTROL ACT
STATE OF MICHIGAN CRITICAL MATERIALS ACT (REVISED 1986)
0.037% zinc

To determine applicability or effect of any law or regulation with respect to the product, users should consult his legal advisor or the appropriate government agency. Texaco does not undertake to furnish advice on such matters.

By R. T. Richards Title Mgr. Env. Conservation & Toxicology
Date 08-20-86 ☐ New ☒ Revised, Supersedes 04-16-86

N.D. - Not Determined N.A. - Not Applicable
< - Less Than > - Greater Than