

GW - 190

**GENERAL
CORRESPONDENCE**

YEAR(S):

1996 - 1995

APPLICATIONS

4 OF 4

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

(Includes Contingency Plan)

Prepared For:

**The Western Company of North America
Artesia District**

**2708 Sivley
Artesia, New Mexico 88240**

Prepared By:

**Crouch Environmental Services, Inc.
3915 Cypress Grove Lane
Houston, Texas 77088**

August 22, 1994

Management Approval

This SPCC Plan has been reviewed by management. The Plan has management's approval and will be implemented and periodically updated in accordance with 40 CFR 112 and applicable state requirements.

/s/ John Bendure
Signature

John Bendure
Name

District Manager
Title

Date

Engineer's Certification

I hereby certify that I have examined the SPCC Plan for The Western Company of North America's Artesia District and find it to have been prepared in accordance with good engineering practices and meets the intent and objectives of 40 CFR 112 as amended.

/s/ R M Corder
Signature, Registered Professional Engineer

R M Corder
Name

58120 Texas
Registration Number and State

12/16/94
Date

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**SPILL PREVENTION CONTROL
AND COUNTERMEASURE PLAN
(Includes Contingency Plan)**

The Western Company of North America

**Artesia District
2401 Sivley
Artesia, New Mexico 88240**

1.0 INTRODUCTION

1.1 Purpose

The purpose of the Spill Prevention Control and Countermeasure (SPCC) Plan is to prevent the discharge of petroleum products into the waters of the United States. This will be accomplished by preventing spills and detailing clean-up and recovery measures by focusing on prevention, point source control, emergency spill control and secondary containment.

1.2 General Requirements

This SPCC Plan must be reviewed at least once every three years to include recently developed prevention and control technology, if such technology will significantly reduce the likelihood of a spill event from the facility and if such technology has been field-proven at the time of the review, (40 CFR 112.5 (b)); certification is required by a registered professional engineer (40 CFR 112.5 (c)).

This SPCC Plan must be amended whenever there is a material change in facility design, construction, operations or maintenance that alters the potential for a petroleum products spill or whenever a facility has:

1. Discharged more than 1,000 gallons into navigable waters in a single spill event, or
2. Discharged petroleum products in harmful quantities into navigable waters in two reportable spill events within any 12 month period (40 CFR 112.4 and 40 CFR 112.5).

A copy of this SPCC Plan must be submitted to the EPA and the appropriate State agency after a spill meeting the criteria described in Items 1 or 2 occurs. When amendments to the SPCC Plan are directed by the EPA Administrator or State, they must be implemented within six months. The provisions of this SPCC Plan will be immediately carried out whenever there is a fire, explosion or release that could threaten human health or the environment. Copies of this SPCC Plan and all revisions will be maintained at the Artesia, New Mexico District office.

2.0 FACILITY OPERATIONS

2.1 Description of Facility Operations

Site Data:

A. Name of Facility

The Western Company of North America - Artesia District

B. Type of Facility

Oil field service company

C. Date of Initial Operation

1980

D. Facility Location

2401 Sivley
Artesia, New Mexico

E. Name and Address of Owner

The Western Company of North America
515 Post Oak Blvd. Suite 915
Houston, Texas 77027-9407

F. Name and Address of Operator

The Western Company of North America
2401 Sivley
Artesia, New Mexico 88240

G. EPA ID Number

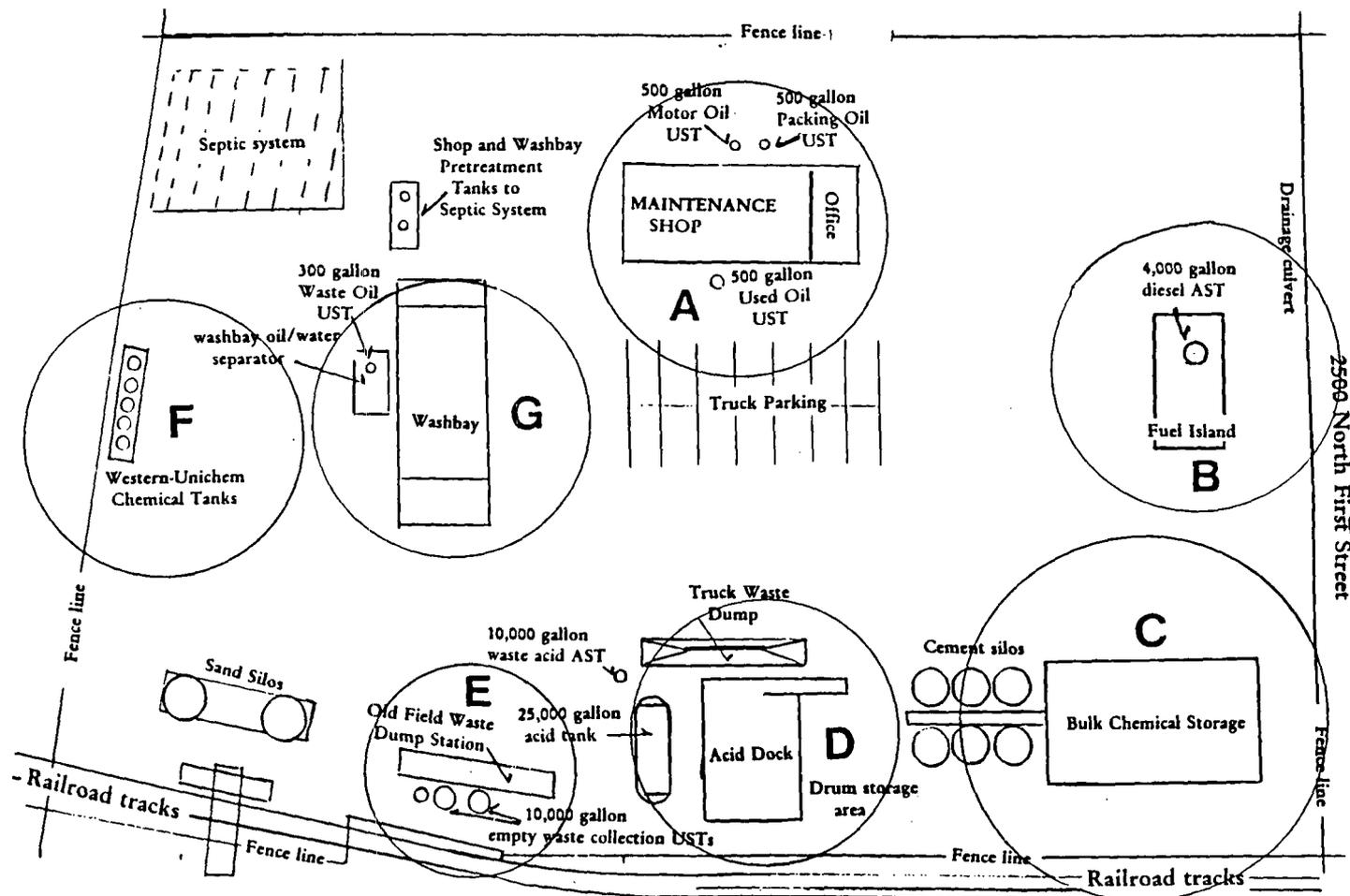
NMD 000 711 515

H. Name and Title of Spill Prevention Coordinator (SPC)

John Bendure
District Manager

2.2 Site Schematic Drawing

2401 Sivley



The Western Co. of North America
Artesia, NM District

I. Oil Products Spill History

In 1992 a leaking UST of spent acid was discovered. Cleanup commenced immediately and an undocumented quantity of contaminated soil was excavated and hauled off-site to C.R.I. for disposal. Groundwater monitoring wells were installed and are monitored periodically to assure that the contamination has been properly remediated.

The Western Company of North America's Artesia District is an oil field service facility that often operates 24 hours a day, 7 days a week. It engages in well fracturing, well cementing, well acidizing, down hole tools, truck maintenance, truck washing, diesel storage and dispensing, bulk sand storage and dispensing, cement processing, storage and dispensing, chemical storage and dispensing, tool maintenance and service and bulk oil storage.

The facility consists of an office and maintenance shop building, bulk chemical storage building, underground (UST) and aboveground (AST) storage tanks, septic system, truck wash oil/water separator, truck washrack, bulk cement silos, sand silos, and yard for truck parking and equipment storage.

Diesel, lubricating oils, cement, cement additives, friction reducers, acid, acid additives, gelling agents, salt solutions, silica and temporary blocking agents are stored on-site at various locations.

Potential Spill Areas

Location	Container	Contents	Failure Type	Stored Amount	Contain-ment
A	AST (1)	Packing Oil	Tank, Line Rupture	250 Gal.	None
A	AST (4)	Lube Oil	Tank, Line Rupture	250 Gal. Ea.	None
A	Drums (2)	Solvents	Rupture, Spill	55 Gal. Ea.	None
A	AST (1)	Cleaning Chemicals	Tank, Line Rupture	250 Gal.	None*
A	Drums (5)	Motor Oil	Rupture, Spill	55 Gal. Ea.	None
A	Drums (24)	Lube Oils	Tank, Line Rupture	55 Gal. Ea.	None*
A	Drums (2)	Lube Oils	Tank, Line Rupture	35 Gal. Ea.	None*
A	UST (3)	Used Oil, Motor Oil, Packing Oil	Tank, Line Rupture	500 Gal. Ea.	None*
A	SUMP (1)	Oil/Water Separator	Line Rupture		None*
B	AST (1)	Diesel	Tank, Line Rupture	4,000 Gal.	None*

Location	Container	Contents	Failure Type	Stored Amount	Containment
D	AST (1)	Acid	Tank, Line Rupture	25,000 Gal.	None*
D	AST (1)	Acid Water	Tank, Line Rupture	250 BBL.	None
D	SUMP (1)	Acid Water	Line Rupture		None
D	ASTs (8)	Misc. Chemicals	Tank, Line Rupture	60 Gal. Ea.	None*
D	Drums (65)	Misc. Chemicals	Rupture, Spill	55 Gal. Ea.	None*
D	Containers (21)	Misc. Chemicals	Rupture, Spill	5 Gal. Ea.	None*
E	AST (1)	Acid (Not In Use)	Tank, Line Rupture		None
E	USTs (3)	Wastewater (Not In Use)	Tank, Line Rupture		None
F	ASTs (22)	Misc. Chemicals	Tank, Line Rupture	80 - 750 Gal. Ea.	Some in Secondary Containment
F	Drum (1)	Misc. Chemicals	Rupture, Spill	55 Gal. Ea.	Secondary Containment
F	Containers (3)	Misc. Chemicals	Rupture, Spill	5 Gal. Ea.	Secondary Containment
G	UST (1)	Oil/Water Separator	Tank, Line Rupture	300 Gal.	None

* On Concrete Foundations or on pavement.

UST - Underground Storage Tank

AST - Aboveground Storage Tank

2.3 Facility Drainage

The site is nearly level. Sheetflow is generally to the east across the facility, however the southern quarter of the facility drains to the south via a shallow depression that flows from north to south. The western side of the facility is bermed with a low soil embankment that is about six inches to 12 inches high, and just outside the western boundary there is a railroad track which is 12 - 24 inches higher than the site. Should a spill flow off-site, it would flow onto flat developed land on the north side of the facility and into shallow ditches that parallel the eastern and southern boundaries of the site. The nearest watercourse is the Pecos River, located 4 miles to the east.

It is assumed that the direction of groundwater flow is east and that subsurface leakage would flow in this easterly direction.

2.4 Description of Storage Facilities

Average Daily Volumes Handled

Acids	100,000 to 999,999,000 pounds
pH Control Materials	10,000 to 99,999 pounds
Cement	100,000 to 999,999 pounds
Cement Additives, General	100,000 to 999,999 pounds
Friction Reducers	500 gallons
Fuels	24,000 to 250,000 pounds
Gelling Agents	6,000 to 10,000 pounds
Lubricants	10,000 to 99,000 pounds
Salt Solutions	10,000 to 99,999 pounds
Silica	100,000 to 999,999 pounds
Temporary Blocking Agents	5,000 to 10,000 pounds
Lost Circulation Materials	25,000 to 50,000 pounds
Solvents	800 to 900 pounds
Proppants	3 silos/300,000 to 1 million pounds
Surfactants, Flammable	100,000 to 99,999 pounds

Storage Facilities

Area A is the Maintenance Shop Building, which is located in the center of the facility near the eastern side of the yard. The area in and around the Maintenance Shop Building has six steel ASTs and four USTs that range in size from 250 gallons to 5,000 gallons. The ASTs contain packing oil, lubricants such as motor oil and used oil, cleaning chemicals and diesel fuel. Numerous 55 gallon steel drums of chemicals, solvents and lubricants are in this area. ASTs are filled through openings in the tops of the containers as are the drums. All ASTs and drums rest on pavement, except for those located outside the shop on the northern side of the building.

Surface spills would flow eastward across the facility. If the spill was not contained on-site, it would exit the site along the eastern boundary into a ditch that parallels this property line. The flow in the ditch is to the south.

Area B, the Fuel Island, is located in the center of the site near the southern boundary of the facility. In this area is one skid-mounted 4,000 gallon steel diesel AST. The diesel is used for SPC mixing. There is no secondary containment for the diesel tank except for a small six inch concrete berm that surrounds the tank. Fleet fueling is handled off-site.

An accidental release of diesel would flow to the southeast across the site and into a shallow depression that would divert the spill toward the southern boundary line. If the spill was not contained on-site, the material would exit the site in the southeastern corner of the facility. From there it would enter a ditch just outside the property that flows to the east.

Area C is the Bulk Chemical Storage Building which is located in the southwest corner of the facility. Inside the building are racks of 55 gallon steel drums that contain friction reducers, surfactants, alcohol based chemicals and acid additives, and other miscellaneous chemicals.

Should an accidental release occur in this area, the spilled material would flow to the southeast. The flow would be intercepted by a paved drainage area that flows to the southeast. If the spill was not contained on-site, it would exit the property at the corner and enter a drainage ditch that flows to the east.

Area D is the Acid Dock area that is located along the western property line and immediately north of the Bulk Chemical Storage Building. This area contains a 25,000 gallon acid AST, an acid water AST, an acid water UST, and numerous drums, containers and eight ASTs of miscellaneous chemicals. The numerous drums, containers and the eight ASTs rest on concrete. The other ASTs are on caliche soil. This area does not have secondary containment except for the paved truck loading dock. Drains from the truck loading dock flow into the acid water UST.

An accidental release of material from this area would flow in a southeasterly direction across the truck parking area where it would be diverted by an unpaved depression that would cause the flow to move to the southeast. If the spilled material was not contained on-site, it would exit the facility at the extreme southeastern corner of the property. Off-site it would enter a drainage ditch that flows to the east.

Area E is the Old Field Waste Dump Station. This area is no longer in use. Behind the Old Field Waste Dump Station are three underground storage tanks with open tops at the surface of the grade. These are inactive, and are full of dirt and debris. There is no secondary containment in the area, but the tanks are empty of fluids. No spill is possible in this area.

Area F is a drum and AST storage area that is located along the northern property line. Empty drums are stored here. Most are empty, and only a few are partially full. The ASTs in this area are used by Western-Unichem for chemical storage. About half of the ASTs are resting in fiberglass secondary containment on concrete pavement.

A spill in this area would flow to the north and/or to the east. If not contained on-site, the spill would flow onto developed industrial property to the north which appears to be flat, or the spill would flow to the east into a bar ditch which parallels the eastern boundary line of the facility. The flow would be diverted to the south by the ditch.

Area G is the Washbay which is located in the northeastern region of the facility. A steel 300 gallon oil/water separator UST is located here. No secondary containment exists for the UST.

An accidental spill in Area G would flow to the east, and if not contained on-site, would flow across the eastern boundary of the facility into a ditch which parallels the site. The flow would be diverted to the south by the ditch.

2.5 Description of Facility Transfer Operations

Average Number of Transfers

Area A:

The Maintenance Shop Building area contains ASTs and drums that dispense lubricating oils daily. The used oil UST and oil/water separator UST receive used oil daily. The two drums of Safety-Kleen solvents are used daily.

The used oil UST and used oil drums are emptied about every 60 days. The drums of lubricating oils are replaced and/or refilled as needed. The used solvent is removed from the site monthly by Safety Kleen.

Area B:

The Fuel Island is presently used for dispensing diesel for SPC mixing as required for jobs. The fleet is fueled off-site.

Area C:

The Bulk Chemical Storage Building contains numerous drums of miscellaneous chemicals that are used daily as needed, and are moved via forklift.

Area D:

The Acid Dock area stores hydrochloric acid in an AST. The acid tank receives new acid weekly. In addition, numerous drums, containers and ASTs contain miscellaneous chemicals that are used daily as needed. Drums and containers are moved via forklift.

Area E:

The Old Field Waste Dump Station is inactive and there are three inactive underground wastewater storage tanks.

Area F:

The ASTs used by Western-Unichem dispense chemicals. Chemicals are dispensed on an as needed basis.

Area G:

The Washbay has one 300 gallon UST for waste oil from the oil/water separator. This UST is emptied every two months by an outside contractor.

Transfer Operations

Area A:

The Maintenance Shop Building area ASTs are filled via hoses from tank trucks. The used oil UST and oil/water UST are filled via pipes from the Shop Building and is emptied via hoses to a vacuum truck for off-site disposal. Drums are moved by forklift and emptied using pumps and hoses.

Area B:

The AST presently being used is to dispense diesel for SPC mixing. Equipment is filled via hoses from tank trucks and dispensing is done using pumps and hoses.

Area C:

The numerous chemical drums and containers are filled and emptied using pumps and hoses. The drums and containers are moved via forklift.

Area D:

The ASTs are filled via pipes and pumps, and are emptied using pumps and hoses. The drums and containers are moved via forklift, and are emptied by pumps and hoses.

Area E:

The Old Field Waste Dump Station is not in use.

Area F:

Some Western-Unichem chemicals are stored in ASTs that are in polyethylene drip pan/spill containment. These containers are filled and emptied via pumps and hoses.

Area G:

The Washbay's oil/water separator is filled from pipes leading from the washbay drain. The water is emptied via pumps to the septic system, and the remaining oil is removed by vacuum trucks using pumps and hoses.

3.0 SPILL PREVENTION AND CONTROL PROCEDURES

3.1 Location and Description of Emergency Spill Response Supplies

The facility is prepared to contain and recover a spill on-site. Supplies necessary for spill containment and recovery are:

- ◆ Six shovels in the Shop to construct temporary berms and containment depressions;
- ◆ 100 - 200 pounds of granular absorbent material in the shop;
- ◆ Six thousand (6,000) pounds of soda ash to neutralize a hydrochloric acid spill;
- ◆ 1,000,000 pounds of sand to contain spilled material; and
- ◆ The site is bermed along the western side with soil that is about six to 12 inches high.

This equipment is maintained by the Facility Supervisor and is located inside the Bulk Chemical Storage Building, Sand Plant and Maintenance Shop Building. Soda ash is stored in the Bulk Chemical Storage Building, and absorbent material is in the Maintenance Shop. Personnel are prepared to use them properly during a spill event.

3.2 Removal of Spills

Areas A, B, C, D, E, F and G

The procedure for handling a spill is as follows:

- ◆ Barrier materials will be appropriately placed to keep spills from leaving the northern, southern and eastern boundaries of the site and to keep material pooled on the pavement, if available.
- ◆ Absorbent materials will be placed on the spill as needed. Soda ash will be spread on all acid spills.
- ◆ Absorbent materials will be collected and placed into DOT approved drums.
- ◆ The drums will be transported by a licensed transporter to an approved disposal site.

3.3 Personnel Training

The facility is responsible for training its personnel in the operation and maintenance of equipment to prevent the discharge of oil products as required by 40 CFR 112 and 40 CFR Chapter 1, Subpart D. The training schedule will consist of frequent briefings, with at least one briefing to assure adequate understanding of the SPCC Plan. Training records will be maintained by the Spill Prevention Coordinator.

Training will be scheduled for the following:

1. Initial assignment training for new employees.
2. Annual refresher training.
3. Special training sessions to be conducted for review of spill events or other events that trigger amendments to the SPCC Plan.

Training program content:

- ◆ Individual responsibility for plan implementation
- ◆ Identification of operations and areas of potential spills
- ◆ Spill prevention strategies
- ◆ Location of emergency response equipment
- ◆ Emergency procedures
- ◆ Spill control measures including operation of equipment to prevent discharges
- ◆ Emergency contacts and chain of command
- ◆ Corrective action procedures
- ◆ Record keeping
- ◆ SPCC Plan modifications

Response to a Spill:

An employee who identifies a spill will, if trained, take action to control the spill and then will notify the Spill Prevention Coordinator.

3.4 Storage Procedures

No storage container will be used unless its material and its construction are compatible with the material stored and conditions of storage such as pressure, temperature, corrosivity, as well as other compatibility considerations. All bulk storage tank installations will be constructed so that a secondary means of containment is provided for the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation.

3.5 Transfer Operation Procedures

All personnel of The Western Company shall ensure that the following precautionary measures are taken during transfer procedures in all areas of the facility:

- ◆ No smoking in the vicinity of flammable and/or explosive tanks, drums or carrier vehicles.
- ◆ Limit access to the area so unnecessary personnel will not interfere with the transfer operation.
- ◆ Transferring vehicle will set parking brake.
- ◆ Verify that the volume being transferred is less than the unfilled volume of the receiving container.
- ◆ Trained personnel will conduct and/or oversee the transfer operation.
- ◆ Clean-up any material dripped or spilled during the transfer.

3.6 Security

The facility's nominal work hours are 8:00 AM to 6:00 PM, however activities often occur 24 hours per day, 7 days per week. The site is enclosed by a fence, but the gate is not locked. Trained personnel are not always on duty 24 hours a day.

3.7 Illumination

The entire facility is lighted during the hours of darkness by automatic external lights on buildings and light poles located throughout the site.

3.8 Inspection and Recording Procedures

As part of the SPCC Plan the facility will conduct quarterly inspections and record such inspections of all tanks, valves, containers, piping and hoses used to store or transport hydrocarbon products and hazardous materials. The inspections will be implemented by the Spill Prevention Coordinator. The inspections will focus on potential spill sources such as:

- ◆ Storage tanks
- ◆ Drums
- ◆ Containers
- ◆ Piping and hoses
- ◆ Separators
- ◆ Truck Field Waste Station
- ◆ Loading and unloading areas

Aboveground tanks and assorted containers should be checked visually for tightness integrity. All aboveground valves and piping should be inspected regularly by operations personnel to determine their general condition.

Spill response equipment and supplies will be inspected quarterly. Deficiencies will be reported to the Spill Response Coordinator.

A Recording and Inspection Form is located in Appendix A. Inspection records will be maintained by the Spill Prevention Coordinator. Completed inspection records will be maintained with the SPCC Plan for a period of three years.

4.0 CONTINGENCY PLAN

4.1 Emergency Response Action List

Facility Supervisor

Joe Greenwood

(W) 505/746-3140

(H) 505/746-2059

Spill Prevention Coordinator

John Bendure

(W) 505/746-3140

(H) 806/798-8680

Fire Department

505/746-2701 or 911

Ambulance

505/746-2701 or 911

Physician

Dr. Owen C. Taylor

(W) 505/746-2521

(H) 505/746-4582

Hospital

Artesia General Hospital

505/748-3333

Clean-up Contractor

EmTech

800/336-0909

Law Enforcement

Artesia City Police
505/746-2704 or 911

Eddy County Sheriff
505/746-2704 / 746-9888

New Mexico State Police
505/746-2704

Poison Control Center

Artesia
800/432-6866

The Western Company of North America's Environmental Coordinator

Angela Hardy
(W) 713/629-2864

4.2 Emergency Procedures

During an emergency, the Spill Prevention Coordinator or his designated Coordinator will take all reasonable measures necessary to ensure that fires, explosions and releases do not occur, recur or spread to other areas of the facility. These measures must include, where applicable, stopping processes and operations and collecting and containing spill material. If the facility stops operations in response to a fire, explosion or release, the Spill Prevention Coordinator must monitor for leaks, pressure buildup or ruptures in valves, pipes or other equipment, wherever this is appropriate.

Response to Spills

The facility employees will be made aware of the need to report all spills, with the exception of minor spills or drips. When observing a spill, personnel on scene will immediately notify the Spill Prevention Coordinator and take emergency remedial action to mitigate the damage.

4.3 Corrective Action

If a significant spill or other event occurs, a meeting that includes all personnel will be held to discuss causes of the situation, remedial activities and preventive measures. The meeting will be documented and the SPCC Plan amended as necessary. Personnel will receive additional training as necessary to prevent future incidents and to review SPCC Plan revisions.

4.4 Spill Reporting and Documentation

The facility Spill Prevention Coordinator is responsible for all reporting and documentation procedures. Spills entering the drainage ditches or other property adjacent to the facility in harmful quantities as defined by 40 CFR 110.3 are required to be reported under 40 CFR 110.10. The facility will document for its own records all spills onto its site with the exception of minor spills and drips. Spill reporting and documentation procedures are as follows:

1. The Spill Prevention Coordinator, when notified that a spill has occurred, will complete a Spill Documentation Form (Copy of form is in Appendix A).
2. If it is determined by the Spill Prevention Coordinator that the spill has entered off-site ditches, the Coordinator will proceed with the following report procedures:
 - ◆ Notify The Western Company of North America Environmental Coordinator

Angela Hardy
515 Post Oak Blvd.
Suite 915
Houston, Texas 77027-9407
713/629-2864

- ◆ The Western Company of North America's Environmental Compliance Manager will contact state and federal agencies and will submit the written spill documentation information.

1. Call the National Response Center and report that a spill has occurred.
2. Notify and file a copy of the spill documentation form with the Environmental Protection Agency.

EPA Region 6
Water Division
1445 Ross Ave.
Dallas, Texas 75202
214/655-6444

3. Notify and file a copy of the spill documentation form with the New Mexico Hazardous Waste & Radioactive Materials Bureau.

New Mexico Hazardous Waste & Radioactive Materials Bureau
525 Camino de Los Marquez
Santa Fe, NM 87502
505/827-4300

APPENDIX A

Site Facility Environmental Inspection Report Form

*SPCC inspections **ARE REQUIRED BY LAW**
to be done on a quarterly basis
by the SPC or Senior Management at the location
as required by 40 CFR 112 and 40 CFR Chapter 1, Subpart D*

ACID DOCKS/TANKS	Yes	No	Action
34. Is acid dock area and adjacent areas clean of spills?	W		
35. Are dock drains clear and operating?	W		
36. Are warning signs in place?	D		
37. Are tank lines, valves, and connections in working order?	W		
38. Is vent system working properly?	W		
39. Are liquid levels in product and waste tanks monitored and recorded?	W		
40. Is pH of waste tank checked and recorded?	W		
41. Do tanks or containment show signs of corrosion or leakage?	W		
CHEMICAL STORAGE/BULK PLANT	Yes	No	Action
42. Are containers in good condition, properly labeled and stored upright?	W		
43. Are there signs of spills?	D		
44. Is the bulk plant floor clean?	W		
45. Is waste cement tank approaching capacity?	W		
FIELD WASTE DUMP STATION/TANK	Yes	No	Action
46. Are there signs of spills on adjacent soils or asphalt?	D		
47. Are tank levels monitored and recorded?	D		
48. Are liquid levels above 80% capacity?	D		
49. Are tank valves working properly?	D		
50. Does tank show signs of corrosion or leaks?	D		
SPC AREA	Yes	No	Action
51. Is the area clean and free of stains?	D		
52. Are all spills cleaned?	D		

GENERAL	Yes	No	Action
53. Have all surface impoundments been removed?			
54. Has follow-up action been taken as noted on previous inspection forms?			
RECORDS	Yes	No	Action
55. Is the Environmental Files system in good order? (See List of Files at location).			
56. Have the disposal records been filed?			
57. Have the daily tank gauging records been filed?			
58. Have the environmental inspection records been filed?			
59. Have permits and registrations been filed?			

W=weekly D=daily M=monthly

Remarks/Action: _____

APPENDIX B

Spill Response Form

THE WESTERN COMPANY OF NORTH AMERICA
Spill Response Form

TYPE OF INCIDENT _____

DATE OF INCIDENT _____

TIME OF INCIDENT _____

Emergency Coordinator's Name _____

Emergency Coordinator's phone number _____

Location of Incident _____

Name of materials involved _____

Quantity of materials involved _____

Extent of injuries _____

Hazards to human health or environment _____

Quantity and disposition of all contaminated or recovered materials, including clean-up debris _____

Cause of emergency _____

Analysis of emergency notification, response, control and clean-up procedures _____

APPENDIX C

Spill Documentation Form

(The items underlined will be completed with the appropriate information relating to the spill. The information will not be underlined in the letter).

Date

{Name of Agency}
{Address of Agency}
{City State Zip}

RE: Facility ID No: _____
The Western Company of North America-_____ District

Sir/Madam:

This is written notification of a {amount and name of product} spill that occurred on {date of spill}. The spill occurred at {address of spill}. There were {describe the number of people injured and the extent of injuries, if any} injuries as a result of this spill. Hazards {did/did not} occur to human health or the environment outside the facility. A call was placed to {name of person, name of agency, date, time} to report this spill. The following actions were taken ---

Sincerely,

Phillip Box
THE WESTERN COMPANY OF NORTH AMERICA

pc: {district} EC
{district} envl file
ERF

h:\spec\spill.ltr

SECTION XII

GEOLOGICAL/HYDROLOGICAL EVIDENCE

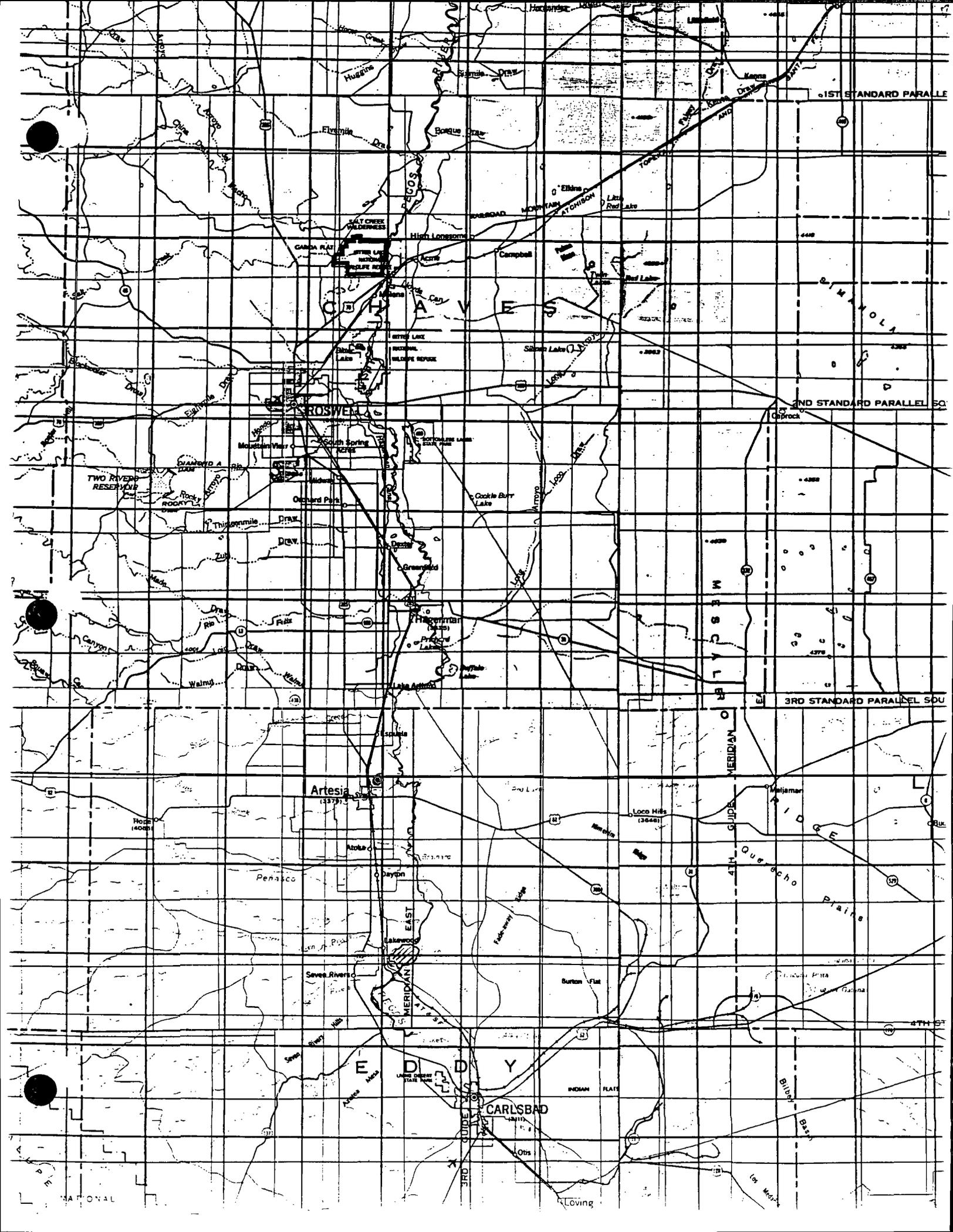
The Pecos River is approximately 4 miles to the east of the property. This is a very small branch of the river that flows into Lake McMillan to the far south of Artesia.

Only a very heavy rain storm could cause any significant flooding due to run-off.

A drainage culvert on the south side of the property would catch rainfall run-off.

A well search was conducted by Brown and Caldwell, consultants for The Western Company. This water well search included well locations (by quarter/quarter section), well depth, water level, water quality, and use of each well. This search was conducted at the State Engineer's office in Roswell, New Mexico on February 21, 1993. No existing water wells within one-half (1/2) mile of the facility were identified.

Boring reports from monitor wells installed along the west fence line relating to the wastewater underground tank collapse indicate hard packed caliche is the surface covering. At about five feet, the soil becomes silty clay with some sand and small gravel; from white to tan. At about ten feet the texture turns to clay. This area is underlain by quaternary sediments.



1ST STANDARD PARALLEL

2ND STANDARD PARALLEL

3RD STANDARD PARALLEL

4TH ST

ROSWELL

ARTESIA

CARLSBAD

MERIDIAN EAST

MERIDIAN

GUIDE MERIDIAN

3RD GUIDE MERIDIAN

4TH GUIDE MERIDIAN

E D Y

QUE SCHO PLAINS

BIRD BLISS

SECTION XIII
COMPLIANCE INFORMATION

State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
Santa Fe, New Mexico 87505



RECEIVED
JAN 30 1994

HEALTH AND
FACILITIES CONSTRUCTION

January 26, 1995

CERTIFIED MAIL
RETURN RECEIPT NO. P-765-962-811

Mrs. Angela Hardy
Environmental Coordinator
The Western Company
515 Post Oak Blvd.
Suite 915
Houston, TX 77027-9407

**RE: Discharge Plan Requirement
Artesia Facility
Eddy County, New Mexico**

Dear Mrs. Hardy:

Under the provision of the Water Quality Control Commission (WQCC) Regulations, you are hereby notified that the filing of a discharge plan is required for the Artesia Facility located in Eddy County, New Mexico.

The notification of discharge plan requirement is pursuant to Section 3-104 and 3-106 of the WQCC regulations. The discharge plan, defined in Section 1.101.P of the WQCC regulations should cover all discharges of effluent or leachate at the facility site or adjacent to the facility site. Included in the plan should be plans for controlling spills and accidental discharges at the facility, including detection of leaks in buried underground tanks and/or piping.

Pursuant to Section 3-106.A, a discharge plan should be submitted for approval to the OCD Director within 120 days of receipt of this letter. Three copies of the discharge plan should be submitted.

VILLAGRA BUILDING - 408 Galisteo

Forestry and Resources Conservation Division
P.O. Box 1948 87504-1948
827-5830

Park and Recreation Division
P.O. Box 1147 87504-1147
827-7465

2040 South Pacheco

Office of the Secretary
827-5950
Administrative Services
827-5925
Energy Conservation & Management
827-5900
Mining and Minerals
827-5970
Oil Conservation
827-7131

Mrs. Angela Hardy
January 26, 1995
Page 2

A copy of the regulations have been provided for your convenience. Also provided was an OCD guideline for the preparation of discharge plans at oil & gas service companies. The guideline addresses berming of tanks, curbing and paving of process areas susceptible to leaks or spills and the disposition of any solid wastes.

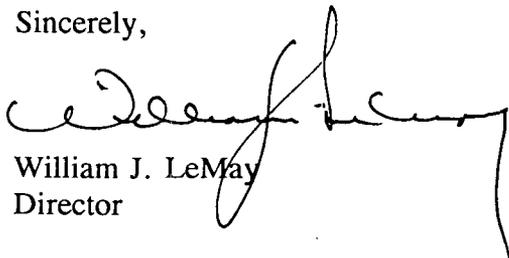
The discharge plan is subject to the WQCC Regulation 3-114 discharge plan fee. Every billable facility submitting a discharge plan will be assessed a fee equal to the filing fee of fifty (50) dollars plus the flat rate of one thousand, three hundred and eighty (\$1380) dollars for oil & gas service companies. The fifty (50) dollar filing fee is due when the discharge plan is submitted. The flat rate fee is due upon approval of the discharge plan.

Please make all checks payable to: **NMED Water Quality Management** and addressed to the OCD Santa Fe office.

(505)

If there are any questions on this matter, please feel free to contact Mark Ashley at 827-7155 or Roger Anderson at 827-7152.

Sincerely,



William J. LeMay
Director

WJL/mwa

XC: OCD Artesia Office

*art
WST*

Check No. - 977922
Check Date - 09/16/94

OF NORTH AMERICA

Stub 1 of 1

08796595	07/29	597.00	597.
----------	-------	--------	------

DETACH STATEMENT BEFORE DEPOSITING

CITIBANK DELAWARE, ONE PENN'S WAY NEW CASTLE, DE 19720

CHECK NO. 00977922 97792

OF NORTH AMERICA
515 POST OAK BLVD.
HOUSTON, TEXAS 77027-9407

WESTERN

IN FULL PAYMENT OF ITEMS SET FORTH ON THE ACCOMPANYING REMITTANCE ADVICE

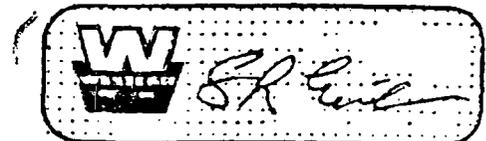
126849 09/16/94 \$*****597.00 $\frac{62}{31}$

VOID IF NOT CASHED IN 60 DAYS

FIVE HUNDRED NINETY SEVEN AND 00/100 *****

THE
ORDER OF:

UNDERGROUND STORAGE TANK FUND
STATE OF NEW MEXICO
HAROLD RUNNELS BLDG
1190 ST FRANCIS DR
SANTA FE, NM 87502



⑈00977922⑈ ⑆031100209⑆ 38852209⑈

UNDERGROUND STORAGE TANK INVOICE

Invoice Number: UST-965-95

WESTERN CO OF NORTH AMERICA
ATTN BENNY HO
515 POST OAK BLVD SUITE 915
HOUSTON TX 770279407

1990 Amount Due: \$.00
1991 Amount Due: \$.00
1992 Amount Due: \$.00
1993 Amount Due: \$.00
1994 Amount Due: \$597.00

Total Amount Due: \$597.00

Date: 29-JUL-94

Enclosed is your invoice for underground storage tanks. The Ground Water Protection Act (NMSA 1978, Section 74-6B-9) has set a fee of \$100.00 per tank per year. Payment is due July 1 of each year for all tanks that will be in the ground for any part of this period. The total amount due includes current fees (1994-1995) and any outstanding fees due from previous years.

If tanks were removed, please send a letter and removal paperwork stating the number of tanks removed and date of removal. If tanks were sold, please notify us in writing with name and address of buyer and date of sale.

Please mail payment to the address listed below ONLY. Utilize a check or money order. DO NOT SEND CASH. Please list your invoice number on your check. If you have questions or problems with this billing, please call the Underground Storage Tank Bureau at 827-2882 or 827-2931.

PLEASE DETACH AND RETURN THIS SECTION WITH YOUR PAYMENT

Make Checks Payable To : UNDERGROUND STORAGE TANK FUND

Mail Checks To : NEW MEXICO ENVIRONMENT DEPARTMENT
ATTN: UST BUREAU, RM N2150
HAROLD RUNNELS BUILDING
1190 ST FRANCIS DRIVE - PO BOX 26110
SANTA FE, NM 87502

Invoice Number: UST-965-95
WESTERN CO OF NORTH AMERICA
ATTN BENNY HO
515 POST OAK BLVD SUITE 915
HOUSTON TX 770279407

1990 Amount Due: \$.00
1991 Amount Due: \$.00
1992 Amount Due: \$.00
1993 Amount Due: \$.00
1994 Amount Due: \$597.00

Total Amount Due: \$597.00

Date: 29-JUL-94

UNDERGROUND STORAGE TANK(S)

Invoice Number: UST-965-95

29-JUL-94 - PAGE: 2

WESTERN CO OF NORTH AMERICA

TANK LOCATION	1990 TANKS	1991 TANKS	1992 TANKS	1993 TANKS	1994 TANKS
WCNA FARMINGTON DISTRICT 3250 SOUTH SIDE RIVER RD PO BOX 360 FARMINGTON NM 87499	9	9	9	9	9
WESTERN CO OF NORTH AMERICA THE INDUSTRIAL PARK ARTESIA NM 88210	3	3	3	3	3
WESTERN CO OF NORTH AMERICA THE A WEST COUNTY RD 2708 HOBBS NM 88240	1	0	0	0	0

1990 TANK TOTAL = 13
 1991 TANK TOTAL = 12
 1992 TANK TOTAL = 12
 1993 TANK TOTAL = 12
 1994 TANK TOTAL = 12



June 14, 1994

New Mexico Environment Department
Underground Storage Tank Bureau
1190 St Francis Drive
Santa Fe NM 87502

RE: The Western Company of North America
Financial Responsibility for Petroleum USTs Demonstrated by
Financial Test of Self-Insurance

Sir/Madam:

I am the Chief Financial Officer of The Western Company of North America, 515 Post Oak Boulevard, Houston, Texas 77027. This letter is in support of the use of the financial test of self-insurance to demonstrate financial responsibility for taking corrective action and compensating third parties for bodily injury and property damage caused by sudden accidental releases and nonsudden accidental releases in the amount of at least \$500,000 per occurrence and \$2 million annual aggregate arising from operating underground storage tanks.

Underground storage tanks at the following facilities are assured by this financial test or a financial test under an authorized State program by The Western Company of North America:

The Western Company of North America-Farmington
3250 South Side River Road
Farmington NM 87499

The Western Company of North America-Artesia
2500 North 1st Street
Artesia NM 88210

A financial test is also used by The Western Company to demonstrate evidence of financial responsibility in the following amounts under other EPA regulations or state programs authorized by EPA regulations or state programs authorized by EPA under 40 1CFR Parts 271 and 145:

EPA Regulations	Amount
Closure (§§264.143 and 265.143)	\$ <u>None</u>
Post-Closure (§§264.145 and 265.145)	\$ <u>None</u>
Liability Coverage (§§264.147 and 265.147)	\$ <u>None</u>
Corrective Action (§264.101 (b)	\$ <u>None</u>
Plugging and Abandonment (§144.63)	\$ <u>None</u>
Closure	\$ <u>None</u>
Post-Closure Care	\$ <u>None</u>
Liability Coverage	\$ <u>None</u>
Corrective Action	\$ <u>None</u>
Plugging and Abandonment	\$ <u>None</u>
Total	\$ <u>None</u>

The Western Company of North America
515 Post Oak Blvd., Suite 1200, Houston, TX 77027
P.O. Box 56006, Houston, TX 77256
713-629-2600 Telex 792093 Fax 713-629-2609

The Western Company of North America has not received an adverse opinion, a disclaimer of opinion, or a "going concern" qualification from an independent auditor on the financial statements for the latest completed fiscal year.

Alternative 1

1.	Amount of annual UST aggregate coverage being assured by a financial test	\$ <u>2,000,000</u>
2.	Amount of corrective action, closure and post-closure care costs, liability coverage, and plugging and abandonment costs covered by a financial test, and/or guarantee	\$ <u>0</u>
3.	Sum of lines 1 and 2	\$ <u>2,000,000</u>
4.	Total tangible assets	\$ <u>232,200,000</u>
5.	Total liabilities (if any of the amount reported on line 3 is included in total liabilities, you may deduct that amount from this line and add that amount to line 6)	\$ <u>157,100,000</u>
6.	Tangible net worth (subtract line 5 from line 4)	\$ <u>75,100,000</u>
		Yes No
7.	Is line 6 at least \$10 million?	<u>x</u> _____
8.	Is line 6 at least 10 times line 3?	<u>x</u> _____
9.	Have financial statements for the latest fiscal year been filed with the Securities and Exchange Commission?	<u>x</u> _____
10.	Have financial statements for the latest fiscal year been filed with the Energy Information Administration?	_____ <u>x</u>
11.	Have financial statements for the latest fiscal year been filed with the Rural Electrification Administration?	_____ <u>x</u>
12.	Has financial information been provided to Dun and Bradstreet, and has Dun and Bradstreet provided a financial strength rating of 4A or 5A? (Answer "Yes" only if both criteria have been met.)	_____ <u>x</u>

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR Part 280.95 (d) as such regulations were constituted on the date shown immediately below.

(Signature) TRH

(Name) Thomas R. Hix

(Title) Senior Vice President and Chief Financial Officer

(Date) June 20, 1994



New Mexico Environment Department
The Underground Storage Tank Bureau

hereby awards this

**Certificate of Registration
of Underground Storage Tanks to:**

OWNER NAME and ADDRESS:

WESTERN CO OF NORTH AMERICA
ATTN BENNY HO
515 POST OAK BLVD SUITE 915
HOUSTON TX 770279407

OWNER ID NO.:

965

FACILITY NAME and ADDRESS:

WESTERN CO OF NORTH AMERICA THE
INDUSTRIAL PARK
ARTESIA NM 88210

FACILITY ID NO.:

965001

NUMBER of TANK(S): 4

The above tank(s) is/are registered with the New Mexico Environment Department, Underground Storage Tank Bureau. Fees due for the above tank(s) for FY 93 (July 1, 1992 - June 30, 1993), under said regulatory program have been paid in full. This certifies compliance under Sections 200-202 and 300 of the Underground Storage Tank Regulations and Section 9 of the Groundwater Protection Act ONLY. The participation of the tank owner(s) in this program of environmental protection is appreciatively acknowledged.

Given this 08 day of July, 1992

Bureau Chief, UST Bureau



STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87503
(505) 827-5271

Russell F. Rhoades, Director
AIR QUALITY BUREAU

Bruce King
GOVERNOR

George S. Goldstein, Ph.D.
SECRETARY

Larry J. Gordon, M.S., M.P.H.
DEPUTY SECRETARY

June 25, 1982

CERTIFIED MAIL NO. 894254
RETURN RECEIPT REQUESTED

Mr. Vern Sorgee
Environmental Compliance Specialist
The Western Company of North America
P.O. Box 186
Fort Worth, TX 76101

RE: Permit # 313-M-1 - Modification - The Western Company of North America
Artesia, New Mexico

Dear Mr. Sorgee;

This letter constitutes a permit pursuant to New Mexico Air Quality Control Regulation 702 for the Western Company of North America to modify its sand and hydrochloric acid storage facility located in Artesia, New Mexico. This permit is issued only for the facility and operational specifications defined in the permit application which was received by this Bureau on May 12, 1982 and deemed complete on May 25, 1982.

The estimated maximum air pollutant emissions from the operation of this sand and hydrochloric acid storage facility are 18 pounds per hour of particulate matter and 4.5 pounds per hour of hydrochloric acid vapours.

The permit application has been evaluated by the Air Quality Bureau for compliance with applicable New Mexico Air Quality Control Regulations, the New Mexico Air Quality Control Act, and both New Mexico and federal ambient air quality standards. There are no federal New Source Performance Standards promulgated for this type of facility. As a result it appears that the construction and subsequent operation of the proposed facility will meet all applicable state and federal air pollution control emission regulations and the dispersed air pollutant emissions will not exceed any state or federal ambient air quality standards.

The permit is issued under the following specific conditions, and general conditions (attached):

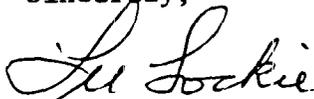
1. The sand storage facility to be constructed at this facility shall consist of two elevated steel silos 1.25 million pounds each and one 400,000 pound capacity sand storage silo. The hydrochloric acid storage shall consist of one elevated steel, rubber-lined storage tank of 25,000 gallon capacity.

Mr. Vern Sorgee
June 25, 1982
Page 2

2. The hydrochloric acid storage facility shall be equipped with an acid vapour scrubber which will be operated at all times during the loading and unloading of the acid.
3. Reasonable measures shall be used wherever and whenever necessary to suppress fugitive particulate matter emissions related to the loading and unloading operations. Visible emissions from fugitive dust emissions shall not exceed 20 per cent opacity.
4. The permittee is authorized to operate this source 8 hours per day, 365 days per year.
5. A performance test for this facility is waived and an inspection by this department shall be made after the facility is put into operation.

If you have any questions regarding this permit or the conditions under which it has been issued, please contact me or Mr. Arun K. Dhawan.

Sincerely,



Lee Lockie
Chief

LL:AKD:lo

cc: Bruce Nicholson *BN*
Arun K. Dhawan
A. S. Shankar *AS*
David Duran *DD*
John Guinn, Env. Mgr., Roswell

General Permit Conditions

1. The permittee shall notify the department of the anticipated date of initial startup within thirty days of startup and shall notify the department of the actual date of initial startup within 15 days after startup.
2. The permittee shall notify the department if it intends to shut down the facility for one year or more within fifteen days after shut down. The permittee shall also notify the department of the date that the facility again commences operation within fifteen days thereon.
3. If construction is not commenced within one year from the date of issuance, or if during construction work is suspended for a total of one year, the department may cancel this permit.
4. This permit and conditions shall apply in the event of any change in control or ownership of this facility. In the event of any such change in control or ownership, the permittee shall notify in writing the succeeding owner of the existence of this permit and shall forward a copy of such letter to the department.
5. If any changes to the plant design or operation are desired by the permittee, including the amount or quality of the fuel used in the engine that may increase air contaminant emissions, such changes shall be proposed to the department for a determination as to whether a permit to modify is required prior to carrying out such changes.
6. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of two years from the recording date.



STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87503
(505) 827-5271

Thomas E. Baca, M.P.H., Director
AIR QUALITY BUREAU

Bruce King
GOVERNOR

George S. Goldstein, Ph.D.
SECRETARY

Larry J. Gordon, M.S., M.P.H.
DEPUTY SECRETARY

May 26, 1980

CERTIFIED MAIL NO.6678789
RETURN RECEIPT REQUESTED

Ms. Kay Lamb, Legal Assistant
The Western Company of North America
P.O. Box 186
Fort Worth, Texas 76101

RE: Cement Blending Plant at Artesia, Application No. 313

Dear Ms. Lamb:

Your permit application requesting permission to construct a cement blending plant at Artesia, New Mexico has been reviewed by the Air Quality Engineering Review Unit.

The results of the review show that neither a permit nor a certificate of registration is required under New Mexico Air Quality Regulations No. 702 and No. 703.

We appreciate your efforts to comply with the New Mexico Air Quality Act and Regulations.

Sincerely,

David O. Quintana

David O. Quintana, P.E.
Air Quality Engineering Section

DOQ:lo

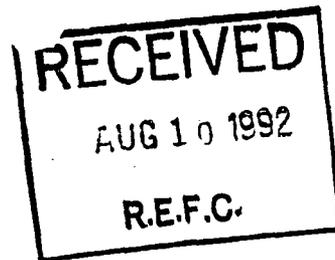
cc: Ken Hargis/David Duran
Don Tryk
John Guinn, Env. Mgr., Roswell



ADD'L INFORMATION }



2710 Stemmons Freeway
1100 Tower North
Dallas
Texas 75207
(214) 630-0001
FAX (214) 630-9866



August 4, 1992

Mr. Roger Anderson
New Mexico Energy Minerals and
Natural Resources Department
Oil Conservation Division
P. O. Box 2088
Santa FE, New Mexico 87504

19-7059-10

Subject: Soil and Water Sample Results
The Western Company of North America
Artesia, New Mexico Facility

Dear Mr. Anderson:

As discussed during our telephone conversation on July 29, 1992, Brown and Caldwell Consultants (BCC), on behalf of the Western Company of North America (WCNA), is submitting the attached analytical results from water and soil samples collected at the WCNA facility. The samples were collected during emergency removal activities of an underground field waste tank at the facility.

Four soil samples and one water sample were collected to verify cleanup of affected material had been achieved (see attached sample location map). The water sample was collected at the bottom of the tank pit from water seeping into the excavation. Soil samples were collected from the walls and floor of the excavation. No sample was collected from the north side of the excavation because this sidewall was removed to allow equipment access to the tank pit.

Your review and comments regarding the attached analytical results as well as future considerations for final closure of the field waste tank will be appreciated. If you have any questions or require additional information please contact me at (214) 630-0001.

Very truly yours,

BROWN AND CALDWELL CONSULTANTS


Lynn M. Wright
Project Manager

LMW:mae

cc/attach: Mr. Phillip Box, Western Company of North America, Houston, TX
Mr. Teddy Gandy, Western Company of North America, Hobbs, NM



SOUTHWESTERN LABORATORIES

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services
222 CAVALCADE * P.O. BOX 8768, HOUSTON, TEXAS 77249 * 713 692-9151

Client THE WESTERN COMPANY OF N.A.
515 POST OAK BLVD., SUITE 915
HOUSTON, TEXAS 77027-9407
713/629-2864 FAX 629-2885
Attn: MS. ANGELA HARDY

Client No. 2_9275_00
Report No. 92-07-500
Report Date 08/05/92 09:26

Project NM 5173/WCNA ARTESIA NM

Date Sampled 07/30/92

Sampled By BROWN & CALDWELL

Sample Type SOIL & LIQUID SAMPLES

Transported by FEDEX

P.O. # _____

Date Received 07/31/92

Lab No.

92-07-500-01
92-07-500-02
92-07-500-03
92-07-500-04
92-07-500-05
92-07-500-06

Sample Identification

EX-1
EX-2
EX-3
EX-4
EXW-1
SP-1

SOUTHWESTERN LABORATORIES

P.S.
Reviewed By

Chris Barry
CHRIS BARRY

08/05/92 09:26

TEST RESULTS BY SAMPLE

Client: THE WESTERN COMPANY OF N.A.

Sample: 01A EX-1

Collected: 07/30/92

<u>Test Name</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Detection Limit</u>	<u>Date Started</u>	<u>Analyst</u>
BTEX - SOIL SAMPLE	SW846 8020					
Benzene	SW846 8020	<0.020	mg/kg	0.020	07/31/92	JFG
Toluene	SW846 8020	<0.020	mg/kg	0.020		
Ethylbenzene	SW846 8020	0.077	mg/kg	0.020		
Xylenes	SW846 8020	0.620	mg/kg	0.020		
DIESEL - SOLID SAMPLE	SW846/8015	54.7	MG/KG	1.0	08/04/92	DBS
TOT.PET.HYDROCARBON PREP	FREON_EXT	08/03/92	DATE		08/03/92	CJG

Sample: 02A EX-2

Collected: 07/30/92

<u>Test Name</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Detection Limit</u>	<u>Date Started</u>	<u>Analyst</u>
BTEX - SOIL SAMPLE	SW846 8020					
Benzene	SW846 8020	<0.40	mg/kg	0.40	07/31/92	JFG
Toluene	SW846 8020	<0.40	mg/kg	0.40		
Ethylbenzene	SW846 8020	0.87	mg/kg	0.40		
Xylenes	SW846 8020	7.48	mg/kg	0.40		
DIESEL - SOLID SAMPLE	SW846/8015	361	MG/KG	1.0	08/04/92	DBS
TOT.PET.HYDROCARBON PREP	FREON_EXT	08/03/92	DATE		08/03/92	CJG

Sample: 03A EX-3

Collected: 07/30/92

<u>Test Name</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Detection Limit</u>	<u>Date Started</u>	<u>Analyst</u>
BTEX - SOIL SAMPLE	SW846 8020					
Benzene	SW846 8020	<0.020	mg/kg	0.020	08/01/92	JFG
Toluene	SW846 8020	0.073	mg/kg	0.020		
Ethylbenzene	SW846 8020	0.315	mg/kg	0.020		
Xylenes	SW846 8020	3.560	mg/kg	0.020		
DIESEL - SOLID SAMPLE	SW846/8015	89.6	MG/KG	1.0	08/04/92	DBS
TOT.PET.HYDROCARBON PREP	FREON_EXT	08/03/92	DATE		08/03/92	CJG

08/05/92 09:26

TEST RESULTS BY SAMPLE

Client: THE WESTERN COMPANY OF N.A.

Sample: 04A EX-4

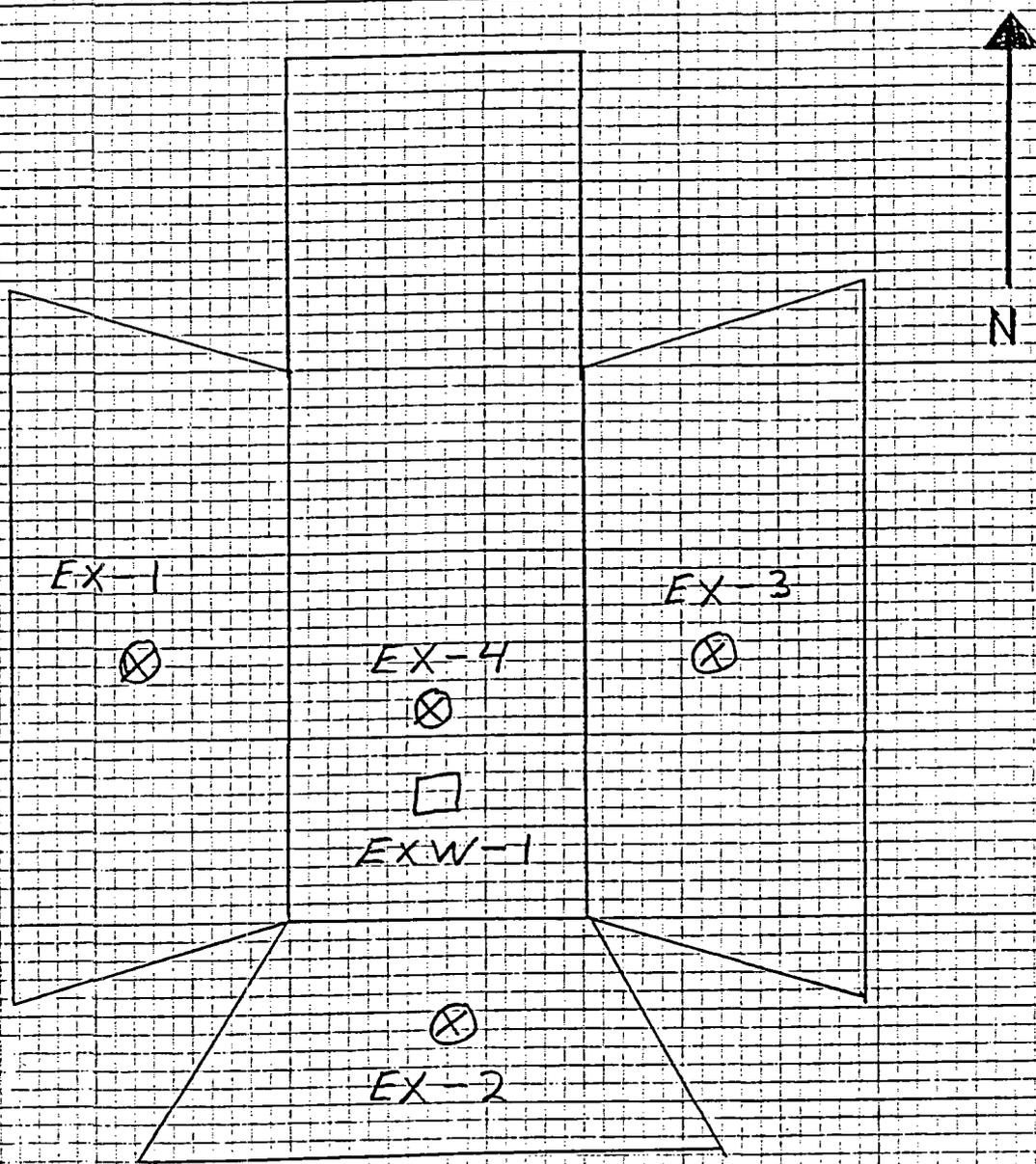
Collected: 07/30/92

<u>Test Name</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Detection Date</u>		<u>Analyst</u>
				<u>Limit</u>	<u>Started</u>	
BTEX - SOIL SAMPLE	SW846 8020					
Benzene	SW846 8020	<0.40	mg/kg	0.40	07/31/92	JFG
Toluene	SW846 8020	1.74	mg/kg	0.40		
Ethylbenzene	SW846 8020	4.74	mg/kg	0.40		
Xylenes	SW846 8020	52.31	mg/kg	0.40		
DIESEL - SOLID SAMPLE	SW846/8015	48.2	MG/KG	1.0	08/04/92	DBS
TOT.PET.HYDROCARBON PREP	FREON_EXT	08/03/92	DATE		08/03/92	CJG

Sample: 05A EXW-1

Collected: 07/30/92

<u>Test Name</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Detection Date</u>		<u>Analyst</u>
				<u>Limit</u>	<u>Started</u>	
BTEX - WATER SAMPLE	SW846_8020					
Benzene	SW846_8020	<0.20	mg/l	0.20	07/31/92	JFG
Toluene	SW846_8020	1.31	mg/l	0.20		
Ethylbenzene	SW846_8020	2.29	mg/l	0.20		
Xylenes	SW846_8020	21.43	mg/l	0.20		
DIESEL - WATER SAMPLE	SW846/8015	45.8	MG/L	1.0	08/04/92	DBS
TOT.PET.HYDROCARBON PREP	FREON_EXT	08/03/92	DATE		08/03/92	CJG



Approximate excavation size is:
30' long X 15' wide X 15' deep

Not to scale

DATE CHECKED	CHECKED BY	7059-10 JOB NUMBER	LW BY	8-3-92 DATE	CALC. NO.	SHEET NO 11
WCNA - Artesia PROJECT		Sample location map SUBJECT				



BRUCE KING
GOVERNOR

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

January 29, 1993

RECEIVED
FEB 1 1993

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-241-937

REAL ESTATE AND
FACILITIES CONSTRUCTION

Mr. Phillip Box
The Western Company of North America
P.O. Box 56006
Houston, Texas 77256

**RE: Artesia Service Facility
Soil & Groundwater Contamination Investigation
Eddy County, New Mexico**

Dear Mr. Box:

The New Mexico Oil Conservation Division (OCD) has received the August 4, 1992, analytical results from water and soil samples collected at the Western Company of North America's (WCNA) Artesia Service Facility submitted by Brown and Caldwell Consultants on behalf of the WCNA. The analytical results were collected during the emergency removal activities of an underground field waste tank at the facility.

Based on the analytical results, the OCD requests that the WCNA submit an investigation workplan to determine the extent and magnitude of the soil and groundwater contamination at your Artesia Service Facility. Please submit the required investigation plan to the OCD Santa Fe Office by March 1, 1993. The plan should include a time schedule for all investigation activities and submission of an investigation report.

Because of the possible threat of contamination to underground drinking water sources, the OCD requires the WCNA to identify all water wells within one-half (1/2) mile of the facility. Include all available data such as location (by quarter/quarter section), well depth, water level, water quality, and purpose of the well (ie. domestic, stock, community). Please submit this information with your investigation workplan.

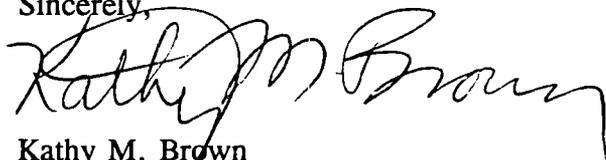
pc: Lynn Wright (BCC)
02-02-93

Mr. Phillip Box
January 29, 1993
Page 2

Please note that when analyzing groundwater samples the detection limit must be low enough to detect contaminant levels at or above the Water Quality Control Commission (WQCC) groundwater standards. Enclosed is a copy of the New Mexico WQCC Regulations.

If you have any questions, please contact me at (505) 827-5884.

Sincerely,

A handwritten signature in cursive script that reads "Kathy M. Brown". The signature is written in black ink and is positioned above the typed name and title.

Kathy M. Brown
Geologist

xc: Mike Williams, OCD Artesia Office



Brown and Caldwell
Consultants

2710 Stemmons Freeway
1100 Tower North
Dallas
Texas 75207
(214) 630-0001
FAX (214) 630-9866

March 3, 1993

Ms. Kathy Brown
State of New Mexico
Energy, Minerals, and Natural Resources Dept.
Oil Conservation Division
Post Office Box 2088
State Land Office Building
Santa Fe, New Mexico 87504

19-7440-01

Subject: Soil and Groundwater Investigation Work Plan for
The Western Company of North America
Artesia, New Mexico Facility

Dear Ms. Brown:

On behalf of The Western Company of North America, Brown and Caldwell Consultants is submitting the enclosed Soil and Groundwater Investigation Work Plan for the Artesia facility.

If you have any questions or require additional information, please contact me or Jack Cooper at (214) 630-0001.

Very truly yours,

BROWN AND CALDWELL CONSULTANTS

Lynn M. Wright
Project Manager

LMW:mae

cc: Mr. Phillip Box, The Western Company of North America, Houston, Texas
OCD Artesia District Office

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**REAL ESTATE AND
FACILITIES CONSTRUCTION**

**Soil and Groundwater
Investigation Work Plan**

**The Western Company of North
America
Artesia, New Mexico Facility**

March 3, 1993



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

March 30, 1993

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-241-954

Mr. Phillip Box
The Western Company of North America
P.O. Box 56006
Houston, Texas 77256

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REAL ESTATE AND
FACILITIES CONSTRUCTION

**RE: Artesia Service Facility
Soil & Groundwater Contamination Investigation
Eddy County, New Mexico**

Dear Mr. Box:

The New Mexico Oil Conservation Division (OCD) has received the March 3, 1993 "Soil and Groundwater Investigation Work Plan" for the Western Company of North America (WCNA) submitted by Brown and Caldwell Consultants on behalf of the WCNA. The above document outlines a plan for an investigation into the extent and magnitude of soil and groundwater contamination at the WCNA Artesia Service Facility. The above referenced Investigation Work Plan is hereby approved with the following conditions:

1. Soil Borings: The WCNA has proposed to drill 4 soil borings to approximately 15 to 20 feet deep. The borings will then be deepened to approximately 25 to 30 feet and completed as monitoring wells. Any changes in the number, location or completion of these soil borings and/or monitor wells must be approved by the OCD.
2. Soil Sampling: Soil samples will be taken approximately every 2 feet on all soil borings. For each soil boring, soil samples from the highest flame ionization detector (FID) or photoionization detector (PID) reading and at approximately 2 feet above the water table, if there is any FID/PID reading at this location, will be submitted for laboratory analysis.

pc: Lynn Wright JM

3. Soil Sample Analysis: The soil samples selected for laboratory analysis will be analyzed for volatile aromatic organics (BTEX) using EPA Method 8020 and for total petroleum hydrocarbons (TPH) using EPA Modified Method 8015. Because waste generated at oilfield service companies is not exempt from RCRA Subtitle C regulations, a soil sample from the borehole with the highest PID/FID reading will also be analyzed for hazardous waste characteristics. Herbicides and pesticides may be omitted if a certified statement from a corporate representative is submitted stating that herbicides and pesticides have never been used at the facility.

4. Groundwater Sample Analysis: The groundwater samples from the monitor wells will be analyzed for BTEX using EPA Method 8020.

NOTE: The proposed groundwater analyses by the WCNA is limited to volatile aromatic organics (BTEX). Please be advised that after evaluation of the investigation results, the OCD will require a full groundwater characterization for all Water Quality Control groundwater standards.

5. Monitor Well Construction: All monitor wells will be constructed with 4-inch diameter PVC casing and will have a minimum of 10 feet of screen below the water table and 5 feet of screen above the water table.

6. Investigaton Report: The WCNA will submit a soil and groundwater investigation report to the OCD within 45 days of completing the proposed investigation. The water well data requested January 29, 1993 by the OCD will be included in the investigation report.

7. Clean-up Fluid Disposal: The WCNA will submit a copy of the authorization for disposal of the fluids removed from the emergency clean-up of the underground field waste tank failure to the OCD. Please include the name of the operator, location and permit number of the Class 2 injection well.

Please contact the OCD at least 7 days prior to all soil borings, monitor well installations, and sampling events so that the OCD has the opportunity to have a representative present and split samples.

Mr. Phillip Box
March 30, 1993
Page 3

Please be advised that the OCD approval does not limit you to the work proposed if the investigation fails to fully delineate the extent of contamination related to the WCNA's activities. In addition, the OCD approval does not relieve you of liability for compliance with any other laws and/or regulations.

If you have any questions, please contact me at (505) 827-5884.

Sincerely,

A handwritten signature in cursive script that reads "Kathy M. Brown". The signature is written in black ink and is positioned above the typed name.

Kathy M. Brown
Geologist

xc: Mike Williams, OCD Artesia Office

BC Brown and Caldwell
Consultants

2710 Stemmons Freeway
1100 Tower North
Dallas
Texas 75207
(214) 630-0001
FAX (214) 630-9866

June 10, 1993

Ms. Kathy Brown
State of New Mexico
Energy, Minerals, and Natural Resources Dept.
Oil Conservation Division
Post Office Box 2088
State Land Office Building
Santa Fe, New Mexico 87504

19-7440-03/01

Subject: Liquid Disposal During Emergency Tank Clean-Up
The Western Company of North America, Artesia, New Mexico Facility

Dear Ms. Brown:

In the New Mexico Oil Conservation Division (OCD) letter dated March 30, 1993, it was requested that The Western Company of North America submit documentation regarding the disposal of liquids recovered during the emergency tank excavation on July 29, 1993. During the tank excavation, Mike Williams of the OCD office in Artesia was contacted and advised of field activities including soil stockpiling and plans for immediate liquid disposal. Mr. Williams agreed that because of the circumstances immediate liquid disposal would be acceptable.

Enclosed with this letter is a fax from Steve Carter, Inc., in Loco Hills, New Mexico, documenting the amount of liquid and the location of disposal.

If you have any questions or require additional information, please call me at (214) 630-0001.

Very truly yours,

BROWN AND CALDWELL CONSULTANTS



Jackie (Jack) Cooper, Jr.
Geologist

JLC:el
Enclosure

cc: ✓ Mr. Phillip Box, The Western Company of North America
Oil Conservation Division, District Office, Artesia, New Mexico

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REAL ESTATE DIV.
FACILITIES CONSTRUCTION

SOIL AND GROUNDWATER
INVESTIGATION

THE WESTERN COMPANY OF
NORTH AMERICA

ARTESIA, NEW MEXICO
FACILITY
JUNE 9, 1993

CHAPTER 2

CHRONOLOGY OF EVENTS

A chronology of events associated with the emergency removal of the field waste tank and subsequent soil and groundwater investigations are presented in Table 2-1. Referenced regulatory correspondence is presented in Appendix A.

Table 2-1 Chronology of Events
The Western Company of North America
Artesia, New Mexico Facility

Date	Description of Event
July 29, 1992	Removal of field waste tank. Tank collapses during removal.
July 30, 1992	Tank pit overexcavated.. East, west, south walls, and floor soil sampled and one water sample collected.
August 4, 1992	Analytical results for soil and water samples submitted to the New Mexico Oil Conservation Division (OCD).
August 10, 1992	Verbal approval to backfill the excavation with clean soil granted by the OCD.
September 8, 1992	Excavation backfilled with clean soil.
October 21, 1992	Stockpiled soil disposed at Controlled Recovery, Inc. (CRI) on Highway 80/62, between Hobbs and Carlsbad, New Mexico.
January 29, 1993	OCD requests the submittal of a technical work plan to define the vertical and horizontal extent of affected soil and groundwater at the facility.
March 3, 1993	Soil and Groundwater Investigation Work Plan submitted to the OCD.
March 30, 1993	OCD approves work plan with modifications.
April 17 to 21, 1993	Soil and groundwater investigation conducted.



STATE OF NEW MEXICO
 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
 OIL CONSERVATION DIVISION



BRUCE KING
 GOVERNOR

ANITA LOCKWOOD
 CABINET SECRETARY

July 1, 1993

POST OFFICE BOX 2088
 STATE LAND OFFICE BUILDING
 SANTA FE, NEW MEXICO 87504
 (505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-241-997

Mr. Phillip Box
 Manager Real Estate and EPA Compliance
 The Western Company of North America
 515 Post Oak Blvd., Suite 915
 Houston, Texas 77027

**RE: SOIL AND GROUNDWATER INVESTIGATION
 THE WESTERN COMPANY OF NORTH AMERICA ARTESIA FACILITY
 EDDY COUNTY, NEW MEXICO**

Dear Mr. Box:

The New Mexico Oil Conservation Division (OCD) has completed a review of the June 9, 1993 "SOIL AND GROUNDWATER INVESTIGATION, THE WESTERN COMPANY OF NORTH AMERICA (Western), ARTESIA, NEW MEXICO" submitted by Brown and Caldwell Consultants on behalf of the Western. The report contains the results of the soil and groundwater investigations to determine the extent and magnitude of soil and groundwater contamination identified during the emergency removal of an underground field waste tank at Westerns Artesia Service Facility. Based on the analytical data and field observations, Western recommends that no further field investigations be conducted and that the existing monitoring wells be sampled in July 1993.

Based on review of the analytical data, the OCD hereby approves the above referenced recommendations with the following conditions:

1. Sampling Schedule: All four monitor wells will be sampled in July 1993 and again in January 1994.

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REAL ESTATE AND
 FACILITIES CONSTRUCTION

✓ 07-06-93 pc:Lynn Wright (BC)

Mr. Phillip Box
July 1, 1993
Page 2

2. Sampling Constituents: The groundwater samples from the monitor wells will be analyzed for volatile aromatic organics (BTEX) using EPA Method 8020. The groundwater samples taken in July will also be analyzed for Polynuclear Aromatic Hydrocarbons (PAH) using EPA Method 8100. If the PAH's are not present then Western does not need to analyze for them during the January 1994 sampling event.
3. Sampling Report: Western will submit the groundwater sampling analytical results to the OCD by August 31, 1993 and February 28, 1994 for the respective sampling period.

Based upon the results of the July 1993 and January 1994 sampling, the OCD will determine if further sampling will be required

Please be advised that OCD approval does not relieve Western of liability should remaining soil contaminants be found to be migrating into ground waters or surface waters or pose a threat to public health. In addition, the OCD approval does not relieve you of liability for compliance with any other laws and/or regulations.

If you have any questions, please do not hesitate to contact me at (505) 827-5884.

Sincerely,



Kathy M. Brown
Geologist

xc: Mike Williams, OCD Artesia Office
Lynn M. Wright, Brown and Caldwell Consultants



Brown and Caldwell
Consultants

1415 Louisiana
Suite 2500
Houston, TX 77002
(713) 759-0999
FAX (713) 759-0952

December 15, 1993

Ms. Kathy Brown
State of New Mexico
Energy, Minerals, and Natural Resources Dept.
Oil Conservation Division
Post Office Box 2088
State Land Office Building
Santa Fe, New Mexico 87504

19-7440-04

Subject: The Western Company of North America
Artesia, New Mexico Facility
Monitoring Well Sampling Event

Dear Ms. Brown:

During April 17 through 21, 1993, Brown and Caldwell (BC) conducted a soil and groundwater investigation at The Western Company of North America (Western) facility located in Artesia, New Mexico. Subsequently, the report "Soil and Groundwater Investigation, The Western Company of North America, Artesia, New Mexico," dated June 9, 1993, was submitted to The State of New Mexico Oil Conservation Division (OCD). Based on the analytical data and field observations, BC recommended that no further field investigations be conducted at the site. However, BC recommended that the existing monitoring wells be sampled in July 1993.

In a letter to Western, dated July 1, 1993, the OCD requested that the existing monitoring wells be sampled in July 1993 and January 1994. The OCD also requested, that for the July 1993 sampling event, groundwater samples should be analyzed for benzene, toluene, ethyl benzene, and xylenes (BTEX) by EPA Method 8020 and polynuclear aromatic hydrocarbons (PAH) by EPA Method 8100. In the referenced letter the OCD stated that, if PAHs were not detected during the July 1993 sampling event, PAHs may be eliminated from the analyses during the January 1994 sampling event.

On July 18, 1993, BC personnel purged and sampled the four existing monitoring wells at the Western facility located in Artesia, New Mexico. The depth to groundwater was measured in each monitoring well prior to purging. The purging and sampling of the monitoring wells was accomplished using the same procedures as in the above mentioned investigation report with the

Use or disclosure of data contained on this sheet is subject to the restriction specified at the beginning of this document.

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Ms. Kathy Brown
December 15, 1993
Page 2

exception that a 2-inch-diameter submersible pump was used to purge the monitoring wells. After purging, a groundwater sample was collected from each monitoring well. The groundwater samples were labelled, placed on ice, and shipped via overnight delivery to BC Analytical in Glendale, California using proper chain of custody procedures.

Groundwater samples collected during this sampling event were analyzed for BTEX and PAHs. EPA Method 8020 was used to analyze for BTEX constituents. Because of a misinterpretation by BC Analytical EPA Method 8270 was used to analyze for PAHs. This analytical method includes all of the constituents listed in EPA Method 8100 which was requested by the OCD; however, EPA Method 8270 has higher detection limits.

Based on the analytical data for the four groundwater samples obtained from the Artesia facility, combined naphthalene and monomethylnaphthalenes are slightly above the groundwater standards of 30 parts per billion (ppb) established by the New Mexico Water Quality Control Commission (WQCC). These standards were published in the State of New Mexico-Energy, Minerals, and Natural Resources Department, Oil Conservation Division's "Environmental Regulations." Due to the analytical methodology used to analyze for PAHs, the detection limit for benzo-a-pyrene was above the WQCC standard for this constituent. Therefore, it cannot be accurately determined whether benzo-a-pyrene was present in concentrations above the WQCC standard. Benzene was the only BTEX constituent identified. Concentrations of benzene ranged from 0.67 ppb in MW-3 to 3.3 ppb in MW-1. These levels are below the WQCC standard.

Because combined naphthalene and methylnaphthalenes were found in concentrations above WQCC standards and an adequate detection limits was not achieved for benzo-a-pyrene, BC recommends that the groundwater samples collected in January 1994 be analyzed for PAHs using EPA Method 8100. In addition, the groundwater samples should be analyzed for BTEX constituents by EPA Method 8020.

Included with this letter are the following enclosures:

ENCLOSURE 1

- Table 1--Summary of Groundwater Elevations
- Figure 1--Groundwater Gradient Map
- Table 2--Summary of Analytical Results for Groundwater Samples

ENCLOSURE 2

- Laboratory Analytical Reports for Groundwater Samples
- Chain of Custody Record

If you have any questions or require additional information, please call me or Lynn Wright at (713) 759-0999.

Use or disclosure of data contained on this sheet is subject to the restriction specified at the beginning of this document.

Ms. Kathy Brown
December 15, 1993
Page 3

Very truly yours,

BROWN AND CALDWELL



Jackie (Jack) Cooper, Jr.
Geologist

JLC:tj
Enclosures (2)

cc: Mr. Phillip Box, The Western Company of North America

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Brown and Caldwell

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REAL ESTATE AND
FACILITIES CONSTRUCTION

THE WESTERN COMPANY OF
NORTH AMERICA

Artesia, New Mexico Facility

Monitoring Well Sampling Event

December 15, 1993

This report was prepared in accordance with the standards of the environmental consulting industry at the time it was prepared. It should not be relied upon by parties other than those for whom it was prepared, and then only to the extent of the scope of work which was authorized. This report does not guarantee that no additional environmental contamination beyond that described in this report exists at the site.

Brown and Caldwell

B R O W N A N D
C A L D W E L L

Art

March 17, 1994

Ms. Kathy Brown
State of New Mexico
Energy, Minerals, and Natural Resources Dept.
Oil Conservation Division
Post Office Box 2088
State Land Office Building
Santa Fe, New Mexico 87504

19-1149-10

Subject: The Western Company of North America
 Artesia, New Mexico Facility
 January 1994 Monitoring Well Sampling Event

Dear Ms. Brown:

On January 28, 1994, Brown and Caldwell conducted a groundwater monitoring well sampling event at The Western Company of North America (Western) facility located in Artesia, New Mexico. The sampling event was conducted in accordance with the State of New Mexico Oil Conservation Division (OCD) letter dated July 1, 1993. The following is a description of the activities conducted during this sampling event.

Prior to purging each monitoring well, the depth to groundwater was measured to the nearest 0.01 foot and recorded. A cumulative table of groundwater elevation data is presented in Enclosure 1, Table 1. The groundwater elevation data was used to calculate well purge volumes, as well as, to estimate groundwater gradient and flow direction. The groundwater flow direction in the vicinity of the monitoring wells continues to be generally west-southwest. Typical groundwater elevation is approximately 2.5 to 3.0 feet lower than measured in July 1993. Based on the current measurements, groundwater gradient is estimated to be approximately 0.02 feet per foot. A groundwater gradient and flow direction map is presented as Figure 1, Enclosure 1.

After depth to groundwater measurements were taken, each monitoring well was purged using

This report was prepared in accordance with the standards of the environmental consulting industry at the time it was prepared. It should not be relied upon by parties other than those for whom it was prepared, and then only to the extent of the scope of work which was authorized. This report does not guarantee that no additional environmental contamination beyond that described in this report exists at the site.

Ms. Kathy Brown
March 17, 1994
Page 2

a 2-inch-diameter submersible pump. During the purging of each monitoring well, measurements were made of the pH, temperature, and specific conductivity of the purged groundwater. These measurements were taken at approximately one-half well volume intervals. Two consecutive measurements within five percent (for each of the three parameters) was used to indicate that groundwater parameters had stabilized.

The groundwater parameters in monitoring wells MW-1, MW-2, and MW-3 stabilized when approximately two well volumes had been removed; however, at least three well volumes were removed from these monitoring wells. Monitoring well MW-4 purged dry after approximately one and one-half well volumes were removed. After purging activities were completed, each monitoring well was allowed to recover to near static water level and a groundwater sample was obtained from each monitoring well.

Groundwater samples were obtained by lowering a stainless steel sampling bailer into the well. Samples were placed in laboratory-cleaned glass sample containers and sealed with Teflon-lined lids. The groundwater samples were labelled, placed on ice, and taken by Brown and Caldwell personnel to Incheape Testing\NDRC Laboratories in Richardson, Texas using chain of custody procedures.

Purging and sampling equipment used by Brown and Caldwell was cleaned prior to each use by washing with a laboratory grade detergent, rinsing with tap water, and then rinsing with distilled water. Purged water and excess water generated by equipment cleaning operations was placed in the on-site waste collection system for treatment and disposal by Western.

Groundwater samples collected during this sampling event were analyzed for benzene, toluene, ethyl benzene, and xylenes (BTEX) by EPA Method 8020 and polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8100.

Benzene concentrations were reported in the groundwater samples from monitoring wells MW-1, at 1.8 micrograms per liter ($\mu\text{g/L}$), and MW-4 at 9.4 $\mu\text{g/L}$. Total benzene, toluene, ethylbenzene, and xylenes (BTEX) was reported in groundwater samples from each monitoring well. Concentrations of total BTEX ranged from 1.1 $\mu\text{g/L}$ in MW-3 to 54.6 $\mu\text{g/L}$ in MW-1. The reported concentrations are below the regulatory limits for groundwater established by the New Mexico Water Quality Control Commission (WQCC), published in the State of New Mexico-Energy, Minerals, and Natural Resources Department, Oil Conservation Division's "Environmental Regulations." Laboratory analytical reports indicated that all PAH analytes were

Ms. Kathy Brown
March 17, 1994
Page 3

below laboratory detection limits. A Summary of Analytical Results for Groundwater Samples is included as Table 2, Enclosure 1. The laboratory analytical reports and chain of custody records are included as Enclosure 2.

The concentration of benzene detected in the sample obtained from MW-1 is near the WQCC standard. Concentrations of other BTEX constituents above the laboratory detection limits were identified in the other existing monitoring wells. Consequently, Brown and Caldwell recommends that another sampling event be conducted in July 1994. Since no PAH analytes above the laboratory detection limits were identified, Brown and Caldwell recommends that analysis of future groundwater samples be limited to BTEX constituents by EPA Method 8020 only.

If you have any questions or require additional information, please call me or Lynn Wright at (713) 759-0999.

Very truly yours,
BROWN AND CALDWELL



Jackie (Jack) Cooper, Jr.
Geologist

JLC:lms
Enclosures (2)

cc: Mr. Phillip Box, The Western Company of North America

MONITORING WELL SAMPLING
EVENT

THE WESTERN COMPANY OF
NORTH AMERICA

ARTESIA, NEW MEXICO
JANUARY 1994

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MAR 24 1994

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