GW - 222

PERMITS, RENEWALS, & MODS Application

Coastal Chemical Co., L.L.C.

"Updated"

May 26, 2010

Oil Conservation Division/EMNRD
New Mexico Environmental Division
Water Quality Management
1220 S. St. Francis Drive
Santa Fe, NM 87505
Attn: Mr. Leonard Lowe

RECEIVED OCD
2010 MAY 27 A 11:25

Re: Coastal Chemical Co., L.L.C.
Discharge Plan Renewal - GW-222

Dear Mr. Lowe:

Please find attached the updated Discharge Plan for Coastal Chemical Co., on behalf of the Farmington, New Mexico facility with the clarifications you requested in your email dated 5/13/2010. I have already paid the $100.00 filing fee in the first submitted renewal with the Discharge Plan Renewal Application.

I have also enclosed a copy of the Public Notice that will be placed in the Daily Times Newspaper in Farmington, New Mexico. I have requested that the newspaper send you proof of the Public Notice running in the newspaper.

Should you have any questions, please do not hesitate to call me at (337) 261-0796 or email me at kmccann@brenntag.com. After your review and approval, please forward the Renewed Permit to the Farmington facility to Kenneth Shepherd's attention for his signature, and a copy to me, if possible, so I can follow up to ensure completion of renewal.

Thank you for your assistance with this renewal process.

Sincerely,

Kathy McCann

Kathy McCann
Quality Coordinator

Enclosures

6133 Highway 90 East - Broussard, La. 70518
Phone: 337.261.0796 Fax: 337.261.0797

PUBLIC NOTICE

COASTAL CHEMICAL CO., L.L.C., 1130 MADISON LANE, FARMINGTON, NEW MEXICO 87401, has submitted a renewal application to the New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division for a renewal discharge plan permit (GW-222) for their FARMINGTON FACILITY located in the NE ¼, NE ¼ of Section 24, Township 29 N, Range 12 West in San Juan County, New Mexico. The physical address of the facility is 1130 Madison Lane, Farmington, New Mexico, 87401. The facility is located in the city of Farmington and approximately 1 mile north of the San Juan River.

Coastal Chemical stores and distributes chemicals and oils to local industry. The facility has thirty two bulk storage tanks, which have the total capability of storing 540,648 gallons of chemicals (identified) or oils on site with secondary containment, but facility only keeps daily inventory at facility of about half that volume. Activities that occur include repackaging and delivery of chemicals. Chemicals are delivered to the facility by either truck or rail at a remote site. The facility has a wash area for rinsing totes. Rinse Water is generated from pumps, hoses and tanks used to deliver virgin chemical. All chemicals rinsed out are virgin, unused chemicals. All liquids utilized at the facility are stored in dedicated above ground storage tanks prior to offsite disposal or recycling at an OCD approved site. All storage tanks are within properly engineered and OCD approved secondary containments. The aquifer most likely to be affected is 50 feet in depth, and the total dissolved solids concentration of this aquifer is approximately 1175 mg/l.

Any interested person or persons may obtain information; submit comments or request to be placed on a facility-specific mailing list for future notices by contacting Leonard Lowe at the New Mexico OCD at 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3492. The OCD will accept comments and statements of interest regarding the renewal and will create a facility-specific mailing list for persons who wish to receive future notices.

Coastal Chemical Co., L.L.C.

Farmington, New Mexico Facility

San Juan County

Discharge Plan Renewal

Discharge Plan GW – 222

Renewal Submitted May 6, 2010
Updated Submittal May 21, 2010

6133 Highway 90 East - Broussard, La. 70518
Phone: 337.261.0796 Fax: 337.261.0797

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Revised June 10, 2003

Submit Original
Plus 1 Copy
to Santa Fe
1 Copy to Appropriate
District Office

DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES,GAS PLANTS, REFINERIES, COMPRESSOR, GEOTHERMAL FACILITES AND CRUDE OIL PUMP STATIONS

(Refer to the OCD Guidelines for assistance in completing the application)

☐ New ☒ Renewal ☐ Modification

1. Type: Chemical and Lubricant Distribution
2. Operator: Coastal Chemical Co., L.L.C.
   Address: 1130 Madison Lane, Farmington, NM 87401
   Contact Person: Kenneth Shepherd Phone: 903-812-0665
3. Location: NE 1 /4 NE 1 /4 Section 24 Township 29 N Range 12 W
   Submit large scale topographic map showing exact location.

4. Attach the name, telephone number and address of the landowner of the facility site.
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.
6. Attach a description of all materials stored or used at the facility.
7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.
8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.
9. Attach a description of proposed modifications to existing collection/treatment/disposal systems. none
10. Attach a routine inspection and maintenance plan to ensure permit compliance.
11. Attach a contingency plan for reporting and clean-up of spills or releases.
12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.
13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.

14. CERTIFICATIONI hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Kathy McCann Title: Quality Coordinator

Signature: Kathy McCann Date: 5-7-10

E-mail Address: kmccann@brenntag.com

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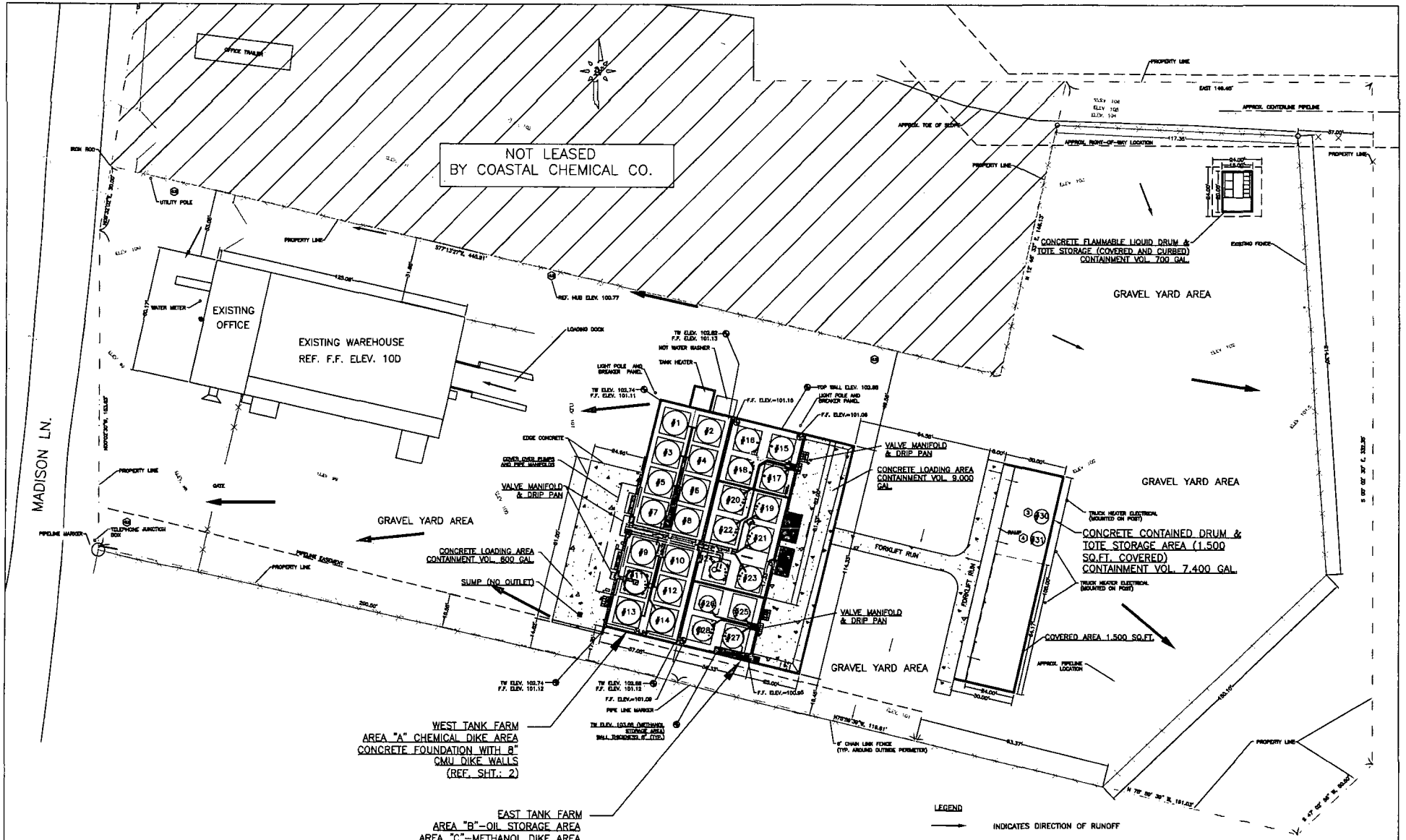
Coastal Chemical Co., L.L.C.

Farmington Facility Owner Information

Averett, Dimmick & Hagen
Chuck Hagen, Agent
650 W. Main Street
Farmington, NM 87402
505-325-8863

6133 Highway 90 East - Broussard, La. 70518
Phone: 337.261.0796 Fax: 337.261.0797


NOT LEASED
BY COASTAL CHEMICAL CO.
MADISON LN.
EXISTING OFFICE
EXISTING WAREHOUSE
REF. F.F. ELEV. 10D
GRAVEL YARD AREA
GRAVEL YARD AREA
GRAVEL YARD AREA
GRAVEL YARD AREA
CONCRETE FLAMMABLE LIQUID DRUM & TOTE STORAGE (COVERED AND CURBED) CONTAINMENT VOL. 700 GAL.
VALVE MANIFOLD & DRIP PAN
CONCRETE LOADING AREA CONTAINMENT VOL. 9,000 GAL.
VALVE MANIFOLD & DRIP PAN
CONCRETE LOADING AREA CONTAINMENT VOL. 800 GAL.
SUMP (NO OUTLET)
VALVE MANIFOLD & DRIP PAN
CONCRETE CONTAINED DRUM & TOTE STORAGE AREA (1,500 SQ.FT. COVERED) CONTAINMENT VOL. 7,400 GAL.
COVERED AREA 1,500 SQ.FT.
WEST TANK FARM
AREA "A" CHEMICAL DIKE AREA
CONCRETE FOUNDATION WITH 8" CMU DIKE WALLS
(REF. SHT.: 2)
EAST TANK FARM
AREA "B"-OIL STORAGE AREA
AREA "C"-METHANOL DIKE AREA
CONCRETE FOUNDATION & 8" CONCRETE WALLS
(REF. SHT.: 2)
LEGEND
INDICATES DIRECTION OF RUNOFF
6' CHAIN LINK FENCE
CONCRETE PAVING
PIPING NOTES:
CHEMICAL AREA PIPING IS 3" SCH. 40 THREADED PIPE
OIL AREA AND METHANOL AREA IS 3" & 4" SCH. 40 WELDED PIPE.
COASTAL CHEMICAL CO., L.L.C.
1130 MADISON LN.
FARMINGTON, NM 87401
2003 SPCC PLAN (REV 2007)
SITE DIAGRAM

#5

#6

Area A - Above Ground Bulk Storage (West Tank Farm)

Tank Designation	Product	Quantity (gal)	Containment	Major Failure Event	Maximum Discharge Rate (gpm)
Storage Tank 1	Triethylene Glycol	16,919	Diked	Tank Rupture	250
Storage Tank 2	Dea 85%	16,919	Diked	Tank Rupture	250
Storage Tank 3	Triethylene Glycol	16,919	Diked	Tank Rupture	250
Storage Tank 4	Triethylene Glycol	16,919	Diked	Tank Rupture	250
Storage Tank 5	Coastal Guard 100	16,919	Diked	Tank Rupture	250
Storage Tank 6	Gas Spec SS Solvent	16,919	Diked	Tank Rupture	250
Storage Tank 7	Coastal Guard 50%	12,690	Diked	Tank Rupture	250
Storage Tank 8	Fleet 15w40	12,690	Diked	Tank Rupture	250
Storage Tank 9	Ethylene Glycol 100	12,690	Diked	Tank Rupture	250
Storage Tank 10	Gas Spec CS+ Additive	8,225	Diked	Tank Rupture	250
Storage Tank 11	Gas Spec Blend Tank	12,690	Diked	Tank Rupture	250
Storage Tank 12	Wash Water	8,225	Diked	Tank Rupture	250
Storage Tank 13	Reprocessed Triethylene Glycol	12,690	Diked	Tank Rupture	250
Storage Tank 14	Gas Spec 2000 Additive	12,690	Diked	Tank Rupture	250
Loading/ Unloading Manifold		300	Diked	Line Rupture	20

This above ground storage area contains fourteen, diked tanks used to receive and store lube oils, solvents, various types of chemical additives and waters for bulk distribution, product packaging, and blending. Transfer to the tanks from trucks or tank cars is accomplished using the truck pump or facility transfer pump. Transfer from the tanks to the product packaging or blending area is accomplished by means of the facility transfer pumps. These tanks are located on a reinforced concrete base within a reinforced concrete dike. Each tank is equipped with locking gate valves, check valves, visible site glasses, gauge hatches, and venting apparatus. All lines are dedicated and equipped with quick

couplers and dust caps. The largest above ground tank in this area has a capacity of 16,919 gallons. The containment system of the area is capable of holding the volume of this tank as well as expected precipitation. Risk of spills during loading and unloading is limited to hose rupture and is minimized by continuous operator attention. Inventory is checked on a regular basis to verify the correct amounts in the above ground storage tanks for distribution. All water within the diked containment area is collected and transferred to a holding tank for testing and discharge approval.

Area B - Above Ground Bulk Storage (East Tank Farm)

Tank Designation	Product	Quantity (gal)	Contain-ment	Major Failure Event	Maximum Discharge Rate (gpm)
Storage Tank 15	Mobil Pegasus 805	12,690	Diked	Tank Rupture	250
Storage Tank 16	Mobil Pegasus Special CF	12,690	Diked	Tank Rupture	250
Storage Tank 17	Summit NGP-150	12,690	Diked	Tank Rupture	250
Storage Tank 18	Mobil Pegasus 805	12,690	Diked	Tank Rupture	250
Storage Tank 19	Mobil PEG Special	12,690	Diked	Tank Rupture	250
Storage Tank 20	Mobil Pegasus 505	16,919	Diked	Tank Rupture	250
Storage Tank 21	Mobil PEG 1005	16,919	Diked	Tank Rupture	250
Storage Tank 22	Mobil Pegasus 505	16,919	Diked	Tank Rupture	250
Storage Tank 23	Mobil Pegasus 710	16,919	Diked	Tank Rupture	250
Storage Tank 24	Coastal Guard 50%	7,614	Diked	Tank Rupture	250
Loading/ Unloading Manifold		300	Diked	Line Rupture	20

This above ground storage area contains ten, diked tanks used to receive and store lube oils, solvents, various types of chemical additives and waters for bulk distribution, product packaging, and blending. Transfer to the tanks from trucks or tank cars is accomplished using the truck pump or facility transfer pump. Transfer from the tanks to the product packaging or blending area is accomplished by means of the facility transfer pumps. These tanks are located on a reinforced concrete base within a reinforced concrete dike. Each tank is equipped with locking gate valves, check valves, visible site glasses, gauge

hatches, and venting apparatus. All lines are dedicated and equipped with quick couplers and dust caps. The largest above ground tank in this area has a capacity of 16,919 gallons. The containment system of the area is capable of holding the volume of this tank as well as expected precipitation. Risk of spills during loading and unloading is limited to hose rupture and is minimized by continuous operator attention. Inventory is checked on a regular basis to verify the correct amounts in the above ground storage tanks for distribution. All water within the diked containment area is collected and transferred to a holding tank for testing and discharge approval.

Area C - Above Ground Bulk Storage (East Tank Farm)

Tank Designation	Product	Quantity (gal)	Containment	Major Failure Event	Maximum Discharge Rate (gpm)
Storage Tank 25	Methanol	8,272	Diked	Tank Rupture	250
Storage Tank 26	Methanol	8,272	Diked	Tank Rupture	250
Storage Tank 27	Methanol	11,750	Diked	Tank Rupture	250
Storage Tank 28	Methanol	11,750	Diked	Tank Rupture	250
Loading/ Unloading Manifold		300	Diked	Line Rupture	20

Area D – Above Ground Bulk Storage

Tank Designation	Product	Quantity (gal)	Containment	Major Failure Event	Maximum Discharge Rate (gpm)
Storage Tank 29	BUSGARD 15 W 40	4,000	**Recessed Concrete Slab**	Tank Rupture	250
Storage Tank 30	BUSGARD 15 W 40	4,000	**Recessed Concrete Slab**	Tank Rupture	250

Area E – Above Ground Bulk Storage

Tank Designation	Product	Quantity (gal)	Containment	Major Failure Event	Maximum Discharge Rate (gpm)
Storage Tank 31	Spent EG	3,760	**Recessed Concrete Slab**	Tank Rupture	250
Storage Tank 32	Spent TEG	8,000	**Recessed Concrete Slab**	Tank Rupture	250

This above ground storage area contains ten, diked tanks used to receive and store lube oils, solvents, various types of chemical additives and waters for bulk distribution, product packaging, and blending. Transfer to the tanks from trucks or tank cars is accomplished using the truck pump or facility transfer pump. Transfer from the tanks to the product packaging or blending area is accomplished by means of the facility transfer pumps. These tanks are located on a reinforced concrete base within a reinforced concrete dike. Each tank is equipped with locking gate valves, check valves, visible site glasses, gauge hatches, and venting apparatus. All lines are dedicated and equipped with quick couplers and dust caps. The largest above ground tank in this area has a capacity of 11,750 gallons. The containment system of the area is capable of holding the volume of this tank as well as expected precipitation. Risk of spills during loading and unloading is limited to hose rupture and is minimized by continuous operator attention. Inventory is checked on a regular basis to verify the correct amounts in the above ground storage tanks for distribution. All water within the diked containment area is collected and transferred to a holding tank for testing and discharge approval.

In the event that spilled oils are recovered in an unusable state, these oils are stored in containers of appropriate size and construction pending disposal, reclamation, or recycling. Storage of these containers is within confined and contained areas in accordance with the objectives of this Plan. Disposal, reclamation or recycling of these oils is performed by licensed facilities in accordance with appropriate Federal and State regulations.

Coastal Chemical Co., L.L.C. maintains a response list delineating the contacts and telephone numbers for the facility response coordinator, National Response Center, cleanup contractors, and all appropriate Federal, State, and local agencies who must be contacted in the event of a discharge. This list is found in Attachment 3.

Tanks are designed in accordance with standards, which comply with and meet or exceed the following standards as applicable: American Standard Bulletin

#7

Coastal Chemical Co., L.L.C.

Farmington Facility Information

Coastal Chemical stores and distributes chemicals to local industry. Our facility has thirty two bulk storage tanks. Activities that occur include repackaging and delivery of chemicals. Chemicals are delivered to the facility by either truck or rail.

The facility has a wash area for rinsing totes. Rinse Water from pump, hoses and tanks used to deliver virgin chemical. All chemicals rinsed out are virgin, unused chemicals. Chemicals may include: Alkanolamine, Glycol (TEG and EG) antifreeze.

Average Amount – 3000 gallons per year or 8.3 gallons per day.

6133 Hwy. 90 East – Broussard, LA 70518 - Phone: 337.261.0796 Fax: 337.261.0797

#8

Waste Management	Section VI.A.	Procedure 1
p. 1 of 1	Effective: 2-12-03 Supersedes: 12-1-94 Review: 12-23-02	Empty Drum Management

Empty Drum Management

Policy: Coastal Chemical Co., L.L.C. is committed to the policy that all self-generated waste and empty containers are disposed of in a responsible manner, in compliance with all local, state and federal regulations.

Responsible Distribution Code: VI. A.
ISO 9000 Standard:
7.5.3 Identification and Traceability
8.3 Control of Nonconforming Product

Empty drums that previously contained a lading and have not been reconditioned are considered a non-conforming product. The following procedures are used to prevent the improper disposal or inadvertent reuse of these containers.

1. Empty drums (steel or poly) are only scheduled for pick up from customers when the following administrative conditions are met:
   - customer requests it;
   - drum had been supplied by Coastal; and
   - Coastal drum supplier or a drum reconditioner will take back empty drum.

2. Empty drums are only picked up from customers when all of the following physical conditions are met. Through inspection, the Coastal driver makes the determination of condition and has authority to reject individual containers from pick-up.
   - drum is empty; no more than 1" of residue remains in the container;
   - all bungs, gaskets are in place (can be replaced by driver) and tight;
   - drum has a label showing "last contained" product; and
   - drum appears to have structural integrity (i.e. not rusted out, no punctures, etc.).

3. The Facility Manager has responsibility for empty drum management:
   - if drums are returnable to supplier, supplier is notified of quantity and approval to hold drums for next supplier delivery, or ship via common carrier are made; and
   - empty drums which previously contained a hazardous material can only be shipped on common or contract carrier when a bill of lading is prepared in accordance with 49 CFR. This bill of lading (delivery ticket) is a Quality Record.

Reviewed By:		Date:	
Approved By:		Date:	

Waste Management	Section VI.A.	Procedure 2
p. 1 of 1	Effective: 2-12-03 Supersedes: 12-1-94 Review: 12-23-02	Other Self-Generated Waste Management

Other Self-Generated Waste Management

Policy: Coastal Chemical Co., L.L.C. is committed to the policy that all self-generated waste and empty containers are disposed of in a responsible manner, in compliance with all local, state and federal regulations.

Responsible Distribution Code: VI. A.
ISO 9000 Standard:
7.5.3 Identification and Traceability
8.3 Control of Nonconforming Product

1. See procedures in Section VI.B.

Reviewed By:		Date:	
Approved By:		Date:	

Waste Management	Section VI.B.	Procedure 1
p. 1 of 1	Effective: 2-12-03 Supersedes: 12-1-94 Review: 12-23-02	Waste Reduction: Bulk Transfers

Waste Reduction: Bulk Transfers

Policy: Coastal Chemical Co., L.L.C. encourages waste reduction programs or procedures, by first trying source reduction, second to recycle/reuse, third to treatment and fourth to disposal.

Responsible Distribution Code: VI. B.
ISO 9000 Standard:
7.5.3 Identification and Traceability
8.3 Control of Nonconforming Product

Spills, leaks and ruptures produce materials that if improperly managed result in waste, a non-conforming product. The following procedures are used to reduce the production of waste in bulk transfer operations.

1. Check eyewash station for proper operation before starting.

2. Gaskets, hoses and pumps are maintained to reduce the production of leaks, drips and ruptures.

3. Pails are used at all truck connections, so that any drips recovered can be emptied into the appropriate truck compartment or bulk tank. Pails will be covered when not in use.

4. Following a bulk product transfer, hoses are walked to the tank or container in order to drain as much product as feasible and reduce putting residue into a drip pan or trough.

5. Cap or plug transfer hoses and return to proper storage.

6. Facility Managers will consider installation of a nitrogen flushing system to reduce line residues.

7. Employees are continually observing for leaks, ruptures, spills and have authority to shut down a transfer operation when operating problems are observed.

8. In tanker shipments and when logistically feasible, compatible products are shipped before incompatibles (see Section IV.A. 1, Compatibility Categories) to reduce the number of wash-outs needed.

Reviewed By:		Date:	
Approved By:		Date:	

Waste Management	Section VI.B.	Procedure 2
p. 1 of 1	Effective: 2-12-03 Supersedes: 12-1-94 Review: 12-23-02	Waste Reduction: Damaged Freight

Waste Reduction: Damaged Freight

Policy: Coastal Chemical Co., L.L.C. encourages waste reduction programs or procedures, by first trying source reduction, second to recycle/reuse, third to treatment and fourth to disposal.

Responsible Distribution Code: VI. B.
ISO 9000 Standard:
7.5.3 Identification and Traceability
8.3 Control of Nonconforming Product

Damaged freight produces non-conforming product. The following procedures are used to manage damaged freight at warehouse receiving locations and ensure they do not become a waste for Coastal.

1. The Facility Manager, in cooperation with freight carriers Insurance Department, has responsibility for managing damaged freight.

2. If a carrier arrives at a warehouse receiving location with damaged freight, determine whether the shipment is a hazardous material or a non-hazardous material.

3. Damaged Hazardous Materials Freight:
   - refuse to accept damaged product in shipment
   - do not make the carrier leave the receiving area with a damaged package
   - provide emergency response as required
   - weigh package to find out amount of product lost
   - note amount and type of damage on carrier's and shipper's bills of lading
   - contact carrier and file a freight claim, ensuring the carrier assumes responsibility for disposition of the damaged product, including costs for managing as hazardous waste. This freight claim is a Quality Record.
   - permit the carrier to temporarily "store" the materials per 49 CFR 177.853 (b) until arrangements are made for proper overpack and return to the shipper or repackaging for resale.
   - if the carrier has not removed the material within 30 days of the incident, follow-up with the carrier every 30 days until it is removed.

4. Damaged Non- Hazardous Materials Freight:
   - decide whether to refuse or accept shipment
   - carrier can be asked to leave the receiving area with a damaged package
   - provide emergency response as required
   - if damaged material is accepted, repair or repackage the material
   - weigh package to find out amount of product lost.
   - note amount and type of damage on carrier's and shipper's bill of lading.
   - contact carrier and file a freight claim for costs associated with repair/repackaging. This freight claim is a Quality Record.

Reviewed By:		Date:	
Approved By:		Date:	

Waste Management	Section VI.B.	Procedure 3
p. 1 of 1	Effective: 2-12-03 Supersedes: 12-1-94 Review: 12-23-02	Waste Recycling/Reuse

Waste Recycling/Reuse

Policy: Coastal Chemical Co., L.L.C. encourages waste reduction programs or procedures, by first trying source reduction, second to recycling/reuse, third to treatment and fourth to disposal.

Responsible Distribution Code: VI. B.
ISO 9000 Standard:
7.5.3 Identification and Traceability
8.3 Control of Nonconforming Product

Waste is considered a non-conforming product. The following procedures are used to minimize waste production through implementation of a recycling alternative.

1. By utilizing the ARU/GDU or other recycling facilities.

2. In some facilities, residue anti-freeze can be used in the bulk tank farm heating system.

3. Retained samples are managed in accordance with Sections IV.F.1 and VI.5.

4. Damaged dry products are repackaged for sale and use per the decision of the Facility Manager.

Reviewed By:		Date:	
Approved By:		Date:	

Waste Management	Section VI.B.	Procedure 4
p. 1 of 2	Effective: 2-12-03 Supersedes: 12-1-94 Review: 12-23-02	Waste Disposal

Waste Disposal

Policy: Coastal Chemical Co., L.L.C. encourages waste reduction programs or procedures, by first trying source reduction, second to recycle/reuse, third to treatment and fourth to disposal.

Responsible Distribution Code: VI. B.
ISO 9000 Standard:
7.5.3 Identification and Traceability
8.3 Control of Nonconforming Product

Waste is considered a non-conforming product. In certain cases waste minimization, recycling/reuse, and treatment are not sufficient to eliminate waste and waste is created for disposal. The Facility Manager, in cooperation with the HS&E Manager, has responsibility for disposing of waste.

Chemical Waste Disposal

1. Chemical products are analyzed in accordance with 40 CFR§ 261 Subparts B, C and D and appropriate State equivalent systems to determine whether they are hazardous waste or can be managed as non-hazardous chemical waste. Waste profiles prepared to support this analysis are a Quality Record.

2. If a chemical product has been determined to be a hazardous waste it is:
   - managed in accordance with 40 CFR§ 262 and appropriate State equivalent systems
   - not retained on-site for more than 90 days after the determination of its hazardous characteristics
   - disposed of at facilities permitted for the waste stream in accordance with 40 CFR§ 266 and appropriate State equivalent systems. The HS&E Manager is consulted in selecting a disposal facility.
   - Uniform Hazardous Waste Manifests and Restricted Waste Notification Statements are Quality Records for these waste streams.
   - annual reports for these waste streams are filed by the HS&E Manager. The exception is Abbeville where the report is filed by the Facility Manager and Facility Materials Manager. These annual reports are Quality Records.

3. If a chemical product has been determined to be a non-hazardous waste it is:
   - labeled and packaged as a non-hazardous waste
   - disposed of at facilities permitted for the waste stream. The HS&E Manager is consulted in selecting a disposal facility.
   - if shipped under a Uniform Hazardous Waste Manifest, the manifest is a Quality Record for the waste streams. In some cases the Quality Record is the shipping paper or other bill of lading (delivery ticket).

Non-Chemical Waste Disposal

1. Other non-chemical waste disposal is handled by contract with a local garbage disposal service. Invoices are the Quality Record.

Reviewed By:		Date:	
Approved By:		Date:	

Waste Management	Section VI.B.	Procedure 5
p.1 of 1	Effective: 2-12-03 Supersedes: 12-1-94 Review: 12-23-02	Sample Disposal

Sample Disposal

Policy: Coastal Chemical Co., L.L.C. will document current operating procedures for each facility.

Responsible Distribution Code: VI.B.
ISO 9000 Standard:
7.5.3 Identification and Traceability
8.3 Control of Nonconforming Product

1. Check eyewash station for proper operation before starting.

2. Samples of virgin product, including sales samples, are returned to their respective bulk tanks, following the same personal protective equipment requirements for bulk receiving.

3. The used sample containers are washed with the appropriate cleaning solution, stored in open top drums and sent to a solid waste landfill. The used cleaning solution is added to the waste tank.

4. Return samples of TEG (Triethylene Glycol) from the Services Group to their waste reprocessed tanks. Services Group sample containers are managed per step 2.

5. Waste glycols are put in their waste tank for proper disposal.

Reviewed by:		Date:	
Approved By:		Date:	

COASTAL CHEMICAL QUALITY SYSTEM PROCEDURE MANUAL

General Operations

Monthly Safety Environmental & Quality Inspection

Document No: GOF100-04
Date of Origin: Jan. 1, 2003

Current Date of Issue: **Dec. 21, 2009**

Facility Location: _____ **Inspection Date:** _____

INSTRUCTIONS: Check or complete as appropriate. Checking NI requires completion of Action Date, Responsible Party at time of inspection. Complete Date Resolved after the action item has been corrected.

NA=not applicable, or none observed during inspection **OK**=Acceptable **NI**=Needs Improvement

Safety/Environmental & Quality Item	NA	OK	NI	Action Date	Responsible Party	Date Resolved	Location of Item	Other Comments
**OFFICE \ WAREHOUSE \ YARD \ TANK FARM **								
LOADING AREA \ TRANSPORTATION								
1. General Housekeeping: work areas uncluttered and clear for emergency egress								
2. Slip, trip, fall hazards eliminated								
3. Rubbish containers emptied								
4. Night/security lighting & timers functional								
5. Employees using proper lifting techniques								
6. Electrical Outlet Integrity/ Unblocked								
7. Extension cords/ portable power tools in good condition								
8. Perimeter locks on building entrances in place/work								
9. Visitor control in place/used								
10. Intrusion alarms tested, if applicable								
11. Smoke detector tested								
12. Retain samples managed								
13. Running, horseplay, unsafe work habits avoided								
14. Exit doors marked with exit sign, kept unlocked during business hours								
15. Non-exit doors marked								

#10

NA=not applicable, or none observed during inspection OK=Acceptable NI=Needs Improvement								
Safety/Environmental & Quality Item	**NA**	**OK**	**NI**	**Action Date**	**Responsible Party**	**Date Resolved**	**Location of Item**	**Other Comments**
16. Emergency Phone Numbers prominently posted								
17. Diagram of fire extinguishers/emergency equipment prominently posted								
18. Fire Extinguishers (10/20# A/B/C): accessible (75' in office), tagged & inspected								
19. No Smoking signs posted								
20. Mezzanine/ balcony used for storage marked for load capacity with rails & toe boards								
21. Damaged bags/drums recovered/ repackaged ASAP								
22. Meters or Scales certified per State Regs. **Date of last certification:_____**								
23. Hazardous Chemical List available (full facility)								
24. Guard on compressor. Warning signs in place for automatic starting.								
25. Fork Lifts : working horn, fire extinguisher, overhead guard, good tires, rubber pads on pedals, no fluid leaks, hour meter, hand brake & backup alarm.								
26. Emergency Spill Response Equipment in stock and readily accessible, and PPE needed is accessible								
27. Edge of dock clearly marked								
28. Pallet racks marked for capacity and properly utilized								
29. Safety Committee meets monthly (full facility)								
30. OSHA 300 form kept current within 6 days (full facility)								
31. No unmarked containers of material which require analysis or identification for disposal								

NA=not applicable, or none observed during inspection OK=Acceptable NI=Needs Improvement								
Safety/Environmental & Quality Item	**NA**	**OK**	**NI**	**Action Date**	**Responsible Party**	**Date Resolved**	**Location of Item**	**Other Comments**
32. Flammable liquids in drums stored outside in maximum								
33. Product segregated in storage by compatibility								
34. No evidence of spillage on yard & paving leading to possible regulatory censure								
35. Pallets stacked safely; broken pallet accumulation limited; none against fence								
36. Trash receptacles away from buildings & dock								
37. Cylinders secured								
38. Safety Shower/eyewash unobstructed & functional								
39. Perimeter fence line walked; & all sections functional								
40. Locks on valves in place/working								
41. Tank valves kept closed, except as needed								
42. Tank ladders & catwalks in good condition								
43. Metal tanks maintained & grounded								
44. Dikes in good condition without ***cracks, holes, or leaks***								
45. Product transfer lines identified, inspected, ***and in good condition***								
46. No evidence of ***leaks /spills /seepage from piping, valves, or fittings***								
47. Are dikes free of liquids?								
48. Area tank supports in good condition - no sign of corrosion, damage, or leaking?								
49. Is water standing around tank or supports?								
50. Are pipe supports in good condition - no signs of corrosion or deterioration?								

NA=not applicable, or none observed during inspection OK=Acceptable NI=Needs Improvement								
Safety/Environmental & Quality Item	**NA**	**OK**	**NI**	**Action Date**	**Responsible Party**	**Date Resolved**	**Location of Item**	**Other Comments**
51. No valve drippage								
52. Storage tank contents identified, using NFPA signals & product name								
53. Storage valves identified by name of product								
54. Tank gauges operable; gauge glasses clear, tapes, floats functioning								
55. Pump maintenance: no seal leakage, necessary drip from packed shafts contained; shaft guards in place								
56. No excessive noise from pumps or other power equipment								
57. Engineering controls for vapor/dust collection available, used, in good condition								
58. Grounding system and Interlock system is used for all liquid packaging/ bulk transfers and is tested to operate properly.								
59. Lot Control implemented as past of packaging process								
60. IBCs in test per DOT date or segregated for testing (30 month re-testing required)								
61. IBCs labeled/marked per DOT/OSHA regulations								
62. Wheels Chocks: Access / Use								
63. Preventive Maintenance Scheduled								
64. Drivers complete daily written inspections/ logs								
RAIL SIDING								
65. Rail siding clean of spilled product/trash; tracks/ties appear safe								
66. Derail devices in place where required; rail tank car flagged when connected; wheels chocked during bulk unloading								

NA=not applicable, or none observed during inspection **OK**=Acceptable **NI**=Needs Improvement

Safety/Environmental & Quality Item	NA	OK	NI	Action Date	Responsible Party	Date Resolved	Location of Item	Other Comments
67. Safety shower/eyewash function; fire extinguisher accessible; static lines in place/functional								
68. Check railcars in facility yard (if applicable), or at remote rail spur by driver, for any tampering or vandalism, prior to unloading.								
STORM WATER INSPECTION CHECKLIST								
69. Good Housekeeping performed								
70. Spill Prevention & Response Plan in place								
71. Erosion Control								
72. Property Berm								
73. Training/Education Program taking place at facility.								
74. Materials Handling Areas								
75. Materials Storage Areas								
76. Property Fence and secured								
77. Processing Area								
78. Transfer Areas								
79. Office Building								
WASTE								
80. No unmarked containers of material which require analysis or identification for disposal								
81. Waste records maintained at facility								
82. Have scheduled pick up of waste to ensure not stored over 90 days in yard?								

				Quanity	Profile	Waste Type		Estimated Cost
82. List of Waste at facility by Quanity, Profile, Type and Estimated Cost								
Note: Give the amount of waste on the yard and the estimated cost to dispose of the waste on yard. (Do not include any waste that a PO has been issued for)								

Comments: _____

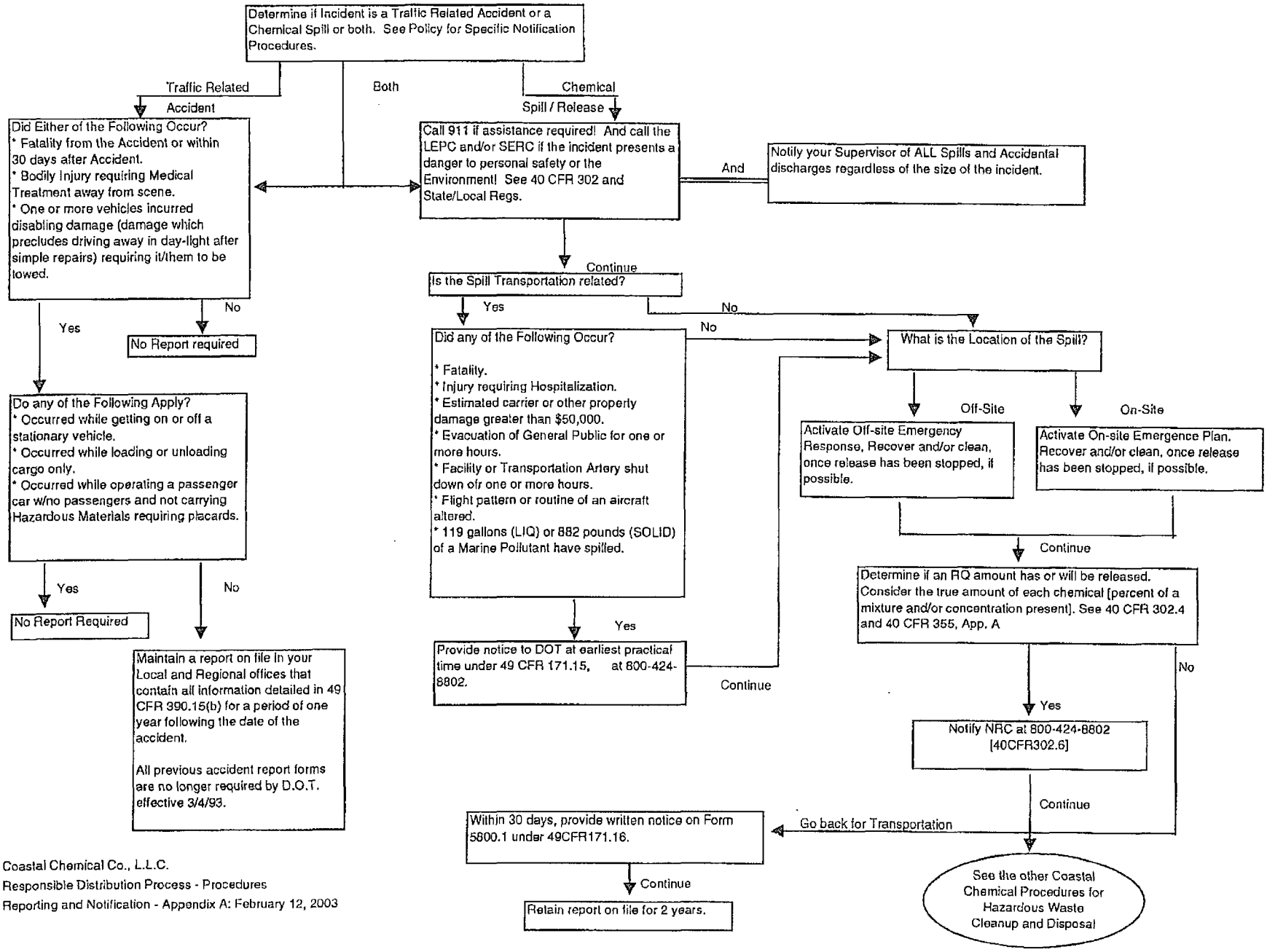
INSPECTOR(S) PRINTED NAME(S) : _____

_____

INSPECTOR(S) SIGNATURE(S): _____

_____

NOTIFICATION TO OUTSIDE AGENCIES IN THE EVENT OF A VEHICLE ACCIDENT OR CHEMICAL SPILL/RELEASE



Coastal Chemical Co., L.L.C.
Responsible Distribution Process - Procedures
Reporting and Notification - Appendix A: February 12, 2003

	In State **(800) 262-3300** Out of State **(800) 258-3300**
EPA Region 5 *Chicago, Illinois* **(312) 353-2318**	**Illinois** *Illinois Environmental Protection Agency* In State **(800) 782-7860** Out of State **(217) 782-7860** **Indiana** *Department of Environmental Management* **(317) 233-7745** **Ohio** *Ohio Environmental Protection Agency* In State **(800) 282-9378** Out of State **(614) 224-0946** **Michigan** *Department of Environmental Quality* In State **(800) 282-9378** Out of State **(517) 373-7660** **Minnesota** *Minnesota Pollution Control Agency* In State **(800) 422-0798** Out of State **(612) 649-5451** **Wisconsin (800) 943-0003**
EPA Region 6 *Dallas, Texas* Toll Free **(866) 372-7745**	**Arkansas** 24 Hours **(501) 730-9750** **Louisiana** 24 Hours **(225) 925-6592** **New Mexico** 24 Hours **(505) 827-9126** **Oklahoma** 24 Hours **(800) 522-0206** **Texas** 24 Hours **(800) 832-8224**
EPA Region 7 *Kansas City, Kansas*	**Iowa** *Emergency Response Commission* **(515) 281-8694** **Kansas** *Department of Health and Environment* **(913) 296-1500**

New Mexico ENVIRONMENT Department

Ground Water Quality Bureau

GWQB Home
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Frequently Asked Questions
Forms
Organization Chart
Regulated Facilities
Regulations and Guidelines
Water Fairs
Public Notices
Notification of spills

GWQB Programs
Grants and Planning
Pollution Prevention
Remediation Oversight
Superfund Oversight
Mining Environmental Compliance

EPA Home Page
EPA Brownfields
EPA Superfund
EPA Water
EPA UIC

Notification of Spills and Unauthorized Discharges

Who Must Provide Notification? The owner, operator, or person in charge of any facility where a discharge has occurred must provide notification of such release to the New Mexico Environment Department.

What Kinds of Discharges Must be Reported? Any amount of any material in such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property; or may unreasonably interfere with the public welfare or the use of property must be reported. This includes chemical, biohazardous, petroleum-product, and sewage spills and incidents. In addition to recent spills, the discovery of evidence of previous unauthorized discharges, such as contaminated soil or ground water, also must be reported.

Are There Reportable Quantities? New Mexico has not established reportable quantities.

When Must Notification Be Provided? Verbal notification must be provided as soon as possible after learning of a discharge, but in no event more than twenty-four (24) hours thereafter.

How Should Notification be Provided?

- **For emergencies, call 505-827-9329 twenty-four hours a day.**
- For non-emergencies, call 866-428-6535 (voice mail, twenty-four hours a day).
- For non-emergencies, and to reach an on-duty NMED staff member during normal business hours, call 505-476-6000.

page last updated 07/15/2009

U.S. Environmental Protection Agency

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For Kids

To report oil and chemical spills, call the National Response Center: 1-800-424-8802.

Environmental Emergencies: Learn more about planning for and responding to emergencies.

Comments or Questions - Search frequently asked questions or submit your own question or comment.

EPA Hotlines: Phone numbers and Web sites for assistance with your questions.

Cus Satis

Tell us if site me ne

EPA Headquarters

Standard Mailing Address
Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
(202) 272-0167

Mailing Addresses for other EPA locations and regional offices.

Employee Directory - Identify EPA employees by name and location.

Comment on EPA regulations: EPA Dockets - EPA Dockets (EDOCKET) is an electronic public docket and on-line comment system designed to expand access to documents in EPA's major dockets.

The Common Questions list presents general information about EPA.

Report Data Errors - Notify EPA of **data errors** found in the EPA Web site's databases. In your notification, please include the URL where you found the error and be as specific as possible regarding the data in error. Your notification will be sent to the Data Steward who can assist in getting the information corrected.

Technical Problems:

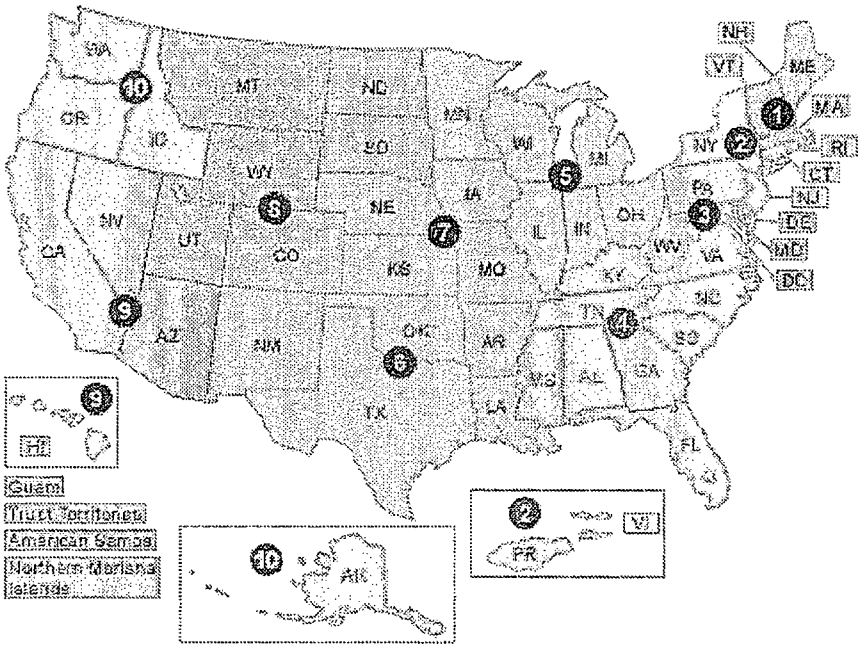
If you want to report a **broken link**, please let us know.

EPA's Internet Technical Support can assist you if you are experiencing technical problems with EPA's Web site, FTP, downloading files, etc.

Contact EPA Regional Offices: select a region below to contact that office.

EPA has ten regional offices, each of which is responsible for several states and territories. To get information about your region, select your state or territory from this list or from the map below. Alabama

GO



Last updated on Monday, June 27th, 2005
URL: http://www.epa.gov/epahome/comments.htm

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Environmental Emergencies | en español

Emergency information about Hurricane Katrina.

Whom to notify and how to be prepared in case of an environmental emergency.

An environmental emergency is a sudden threat to the public health, or the well-being of the environment, arising from the release or potential release of oil, radioactive materials, or hazardous chemicals into the air, land, or water. These emergencies may occur from transportation accidents, events at chemical or other facilities using or manufacturing chemicals, or as a result of natural or man-made disaster events. While there are many other serious environmental problems with which EPA is concerned, these activities are focused generally on sudden, immediate threats.

**To Report Oil and Chemical Spills,
call the National Response Center:
1-800-424-8802**

Different Kinds of Environmental Emergencies

- Oil spills | Chemical spills and accidents | other emergency response: The Office of Emergency Management helps prevent, prepare for, and respond to health and environmental emergencies.
- **Pesticide exposure** - If someone has swallowed or inhaled a pesticide or gotten it in the eye or on the skin **call 911 if the person is unconscious, has trouble breathing, or has convulsions.** Check the label for directions on how to give first aid and call the Poison Control Center at 1-800-222-1222 for help with first aid information. More poison prevention tips. EXIT disclaimer

Who plans for and responds to these emergencies?

There is a complex system of responsibilities for these types of emergencies because there are many parts to them. In general, responsibilities are spread across the federal, state and local sectors, depending upon the size and type of the emergency and involve the environmental, emergency management, public safety, and public health agencies of the three levels of government. In addition, industry has a very important role to play in preparing for and responding to such emergencies.

Some Important Key Groups

- **The National Response Team** EXIT disclaimer is made up of fifteen federal agencies with responsibilities for preparing for, or responding to, major oil or

hazardous chemical emergencies. EPA is the chair with the U.S Coast Guard as vice-chair, and corresponding regional teams are in each of the ten federal regions.

- **Area Contingency Committees** are made up of regional representatives which specifically plan for oil spills.
- **The Federal Response Disaster Group** is made up of over 30 federal agencies with responsibilities for preparing for or responding to major national disasters.
- **The Federal Radiological Preparedness Group** is made up of 17 federal Departments and Agencies. They respond to radiological emergencies under the Federal Radiological Emergency Response Plan (FRERP).
- **The American Red Cross** [EXIT disclaimer] is America's largest humanitarian organization, helping people each year prevent, prepare for and cope with emergencies.

Click here for more information

Additional Concerned Citizens Web Resources
Water | Prevention, Pesticides & Toxics | Pesticides | Solid Waste | Chemical Emergency | Superfund | Global Warming | Region 1: New England States | Region 2: NJ, NY, PR, VI | Region 6: AR, LA, NM, OK, TX | Region 8: Northern/Mountain States

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Last updated on Monday, August 29th, 2005
URL: http://www.epa.gov/epahome/emergenc.htm

#11

COASTAL CHEMICAL QUALITY SYSTEM PROCEDURE MANUAL
General Operations
Accident / Incident and Near Miss Reporting

Document No: GOP100-02 Current Date of Issue: **Oct. 26, 2009**
Date of Origin: Oct. 1, 2004 Page 1 of 3
Approved by: Charles H. Toups

Purpose
Written documentation of any near misses, accidents or incidents by Coastal Chemical employees. An opportunity to improve environmental, health and safety practice based on a condition or an incident with potential for more serious consequence.

Scope
After a near miss, vehicle accident, chemical spill, chemical contamination, property damage or personal injury, an Accident / Incident Report needs to be filed to the Health, Safety & Environmental Department.

Responsibility
Health, Safety & Environmental Department
Facility Managers

Definitions:
A close call or near miss: is an incident that could have resulted in an injury, death, or property damage, but didn't. Close calls are red flag warnings about unsafe conditions, actions or equipment. You should take action to correct the situation and report all close calls, no matter how minor they may seem

Accident / Incident: is an accident or incident that caused injury, death or property damage.

Procedure

1. Facility Manager or trained designees will report to the site of all vehicle accidents or incidents to aid in First aid/CPR of any injured employee, and to gather information for investigation.

2. Facility Manager or trained designee, will take pictures of the accident or incident using the disposable camera kept in all company vehicles, to aid in investigation and for future review. Facility Manager or designee will also use any other equipment (i.e. tape measurer, PPE, emergency triangles, etc.) needed to complete the investigation of the incident or accident safely and in order to complete the required reports.

3. Assessment of area will be conducted to ensure further loss is not incurred to property. Emergency Response companies will be called to conduct clean up and file a complete report, if necessary.

4. Facility Manager or designee will complete the **Accident / Incident Summary Report GOF100-02** within **48 hours** after accident or incident occurred. Facility Manager will also have to complete any Insurance or Workers Comp reporting forms as needed. The report will include information such as weather conditions, names of persons involved and any injuries. If clean up response company is called their clean up report will be included with pictures taken.

   Accident/Incident Report and supporting documentation, is kept in HS&E department, and company insurance company will keep their reports for safekeeping. Coastal Chemical reports will be kept a minimum of 5 years for safekeeping by the HSE dept along with any supporting statements, photograph, or other relevant documentation.

5. A copy of the police report for all vehicle accidents, will be obtained and a copy submitted to our insurance company with all internal reports. Reports will include witness statements and any supporting documentation, pictures or evidence. Any follow-up interviews of witnesses will be handled by company insurance department or management.

6. The completed forms should be sent to the Health, Safety & Environmental Department (HS&E Department) and Risk Manager, Ed Parr, and HR department for review.

7. HS&E and/or Management will make any recommendations to avoid reoccurrence. All incidents and root causes will be discussed during safety meetings to prevent reoccurrence and lessons learned.

8. **NEAR MISSES**: Ignoring near misses & close calls can lead to serious results, including injuries and fatalities. Near misses / close calls should be reported on the GOF100-02 form or the Corrective Action Report and given to facility manager and HS&E department. There is a "no blame policy" for reporting near misses, and feed back to the reporting employee part of the process. A near miss/close call should not be considered a negative or inconvenient event. It is an important opportunity to discover a hazard and correct it without anyone being injured. Prevent injuries, fatalities, and damages by reporting all near misses/close calls. Making a report will ensure that corrective action will be taken to remedy the situation. Near misses should identify:

   - Unsafe condition
   - Unsafe behavior
   - Minor accidents & injuries that had potential to be more serious
   - Events where injury could have occurred but did not
   - Events where property damage results
   - Events where a safety barrier is challenged
   - Events where potential environmental damage could result

How to Protect Yourself

1. Check work areas and equipment daily
2. Take steps to evaluate your work practices. Following all safety procedures. Do not cut corners to save time or turn a blind eye to fellow workers or contractor's unsafe practices.
3. Barricade or clean up any slip and fall hazards on floors immediately.
4. Tag any damaged or broke machinery or equipment.

5. Familiarize yourself with your company's close call reporting system.
6. Report any unsafe acts, improperly used equipment and work conditions.
7. Report and follow up on any close calls/near misses to make sure that a hazard is identified and corrected.

Related Documentation

Accident / Incident and Near Miss Summary Report gof100-02
Corrective Action Report
SRS Form (if needed)
Workers Compensation Form (if needed)

Corresponding ISO Element

4.2 Documentation Requirements
4.2.1 General
4.2.3 Control of Documents
4.2.4 Control of Records

#11

Coastal Chemical Quality System Procedure Manual
General Operations
Accident / Incident Summary Report

Document No: GOF100-02 | Current Date of Issue: **May 6, 2008**
Date of Origin: Oct. 1, 2004 | Page 1 of 1

Instructions: Submit completed form to Manager of HS&E for review.

Reporting Location: _____ **Date of Accident / Incident:** _____
Employee Name: _____ **Time of Accident / Incident:** _____

Accident / Incident Type (check all that apply): ☐ **Personal Injury** ☐ **Vehicle Accident** ☐ **Chemical Release** ☐ **Property Damage** ☐ **Near Miss** ☐ **Other**

Brief Description of Events: _____

Documentation Review: (The following documents have been reviewed and are on file.)

Root Cause: (List Root Cause and Brief Explanation for Arriving at Conclusion)

Corrective Action(s) Taken: _____

Follow Up Recommendations:
(This section to be completed by Coastal Safety Task Group and returned to Manager of HS&E at the reporting company.)

Form completed by: _____ (Name) _____ (Title) _____ (Date)

Received By / Date: _____ _____

3.0 Spill Prevention, Control and Countermeasures Plan, Transfer Procedures, and Incident Reporting.

3.1 Coastal Chemical Co., L.L.C. SPCC Procedures and Training Policy

A. It is the policy of this company that no employee of this facility will be permitted to operate the storage, processing or handling of equipment unless that person can demonstrate the following job knowledge:

- Has the ability to handle the facility non-transportation related equipment.
- Has a thorough knowledge of the grades, names and product characteristics of all bulk materials handled.
- Has knowledge of the capacities of all storage tanks and the products assigned to them.
- Has the ability to gauge and convert the measurements to gallons, pounds and metric quantities.
- Has knowledge of the location and operation of all piping and valves for the entire bulk plant facility.
- Has knowledge of the location and operation of all safety equipment.
- Has knowledge of the location and operation of all oil spill containment equipment and the methods of their correct use.
- Has knowledge of all operating and spill contingency procedures outlined in this plan.
- Has been trained on the overall loading and unloading procedures as outlined in the SPCC Plan.
- Has knowledge of the requirements for reporting, containing, cleaning up and
- Disposing of material generated from a spill.
- Has knowledge of the location and operation of the drain valve for the containment sump. Has been informed that the valve is to remain closed and only opened in the event of massive rain and that water drained from the containment area must be documented in the SPCC Plan.

A. WHAT IS A SPCC PLAN?

Spill Prevention Control and Countermeasure Plan, a basic plan developed by each facility that explains the contents and capacities of a bulk plant operation and its potential to contaminate a navigable water.

B. WHY ARE THEY REQUIRED?

The SPCC PLAN is required under Federal law by 40 CFR, Part 112 of the Federal Register. The regulation is in compliance to the Oil Pollution Act of 1990. To make sure the operator and their employees understand their potential for spills and possible contamination of navigable waters.

C. WHO MUST HAVE A SPCC PLAN?

Any operator, distributor, transporter who handles diesel, gasoline, kerosene, varsol or hydrocarbon oil products. A distributor who has storage capacities of one single tank exceeding 660 gallons, a combination of containers exceeding 1320 gallons or underground storage capacity exceeding 42,000 gallons.

D. WHO MUST BE TRAINED?

All employees of the company to include, management, drivers, dispatchers, warehouse workers, office, clerical and salesman.

E. HOW OFTEN IS TRAINING REQUIRED?

Training is required annually, for current employees.

New employees should be trained within ninety days of employment.

F. HOW OFTEN IS A SPCC PLAN REQUIRED TO BE UPDATED?

The SPCC PLAN should be re-certified every three years by a registered professional engineer. Anytime the facility is changed or modified the plan should be update and the employees informed.

G. HOW OFTEN SHOULD THE SPCC PLAN BE REVIEWED AND BY WHOM?

The plan should be reviewed annually by management and top employees. The plan should be updated if changes have been made within the calendar year.

3.2 TRAINING TOPICS

A. INSPECTIONS AND RECORDS

In the event of a rain or massive flood, records should be kept that identify the amount of water released from the containment areas. Records should be dated and signed by the manager or supervisor. In the event of a spill, overflow or leak document, document everything that occurred. Keep all records for a minimum of five years.

B. SPILL PREVENTION PROCEDURES

All employees should follow the procedures as outlined in the contingency plan to the letter. Deviations should be noted and reasonable explanations given.

C. FACILITY DRAINAGE

All drainage passages should be kept closed at all times. Water drained from the containment area should be done on an as needed basis only. The drain valves should be kept closed at all times. Ditches and storm sewers should be kept open and clear of debris and monitored regularly for build up of oil or fuel residue.

D. FACILITY OPERATION AND PROCESSES

Employees should follow the rules and procedures as outlined in the company policy. Procedures that are routine and outlined by the company are to be followed to the letter.

E. TRANSFER PROCEDURES

These procedures are outlined in the section of the SPCC Plan for Loading and Unloading.

F. SECURITY

All valves are to be locked when the product is not in use and/or after normal business hours. All gates should be locked and secured after hours and on long weekends. All precautions should be taken to prevent any theft or illegal entry. All electrical switches and controls should be turned off after hours.

G. EMERGENCY ACTION PLAN

These procedures are outlined in the SPCC Plan. In the event of an emergency dial 911, then the supervisor or manager. If the situation can be kept under control safely without danger to you, your surrounding neighbors or the environment proceed with caution and extreme care. If in doubt, wait for help.

3.3 COASTAL CHEMICAL CO., L.L.C. - TRANSFER PROCEDURES

I. Unloading Into Plant Storage From Tank Truck Or Tank Car

A. General

Before placing order for product, gauge tanks (s) and compute inventory to be sure the tank (s) will hold amounts being ordered.

All unloading connections, valves, lines, etc. are to be properly labeled, color coded, or numbered and identified.

B. Unloading Procedures

1. Position vehicle, set parking brakes, chock wheels, and ground the vehicle.

2. Check area for ignition hazards (such as welding, smoking, electrical short). Do not unload until all possible sources of ignition have been eliminated.

NOTE: SMOKING IS NEVER PERMITTED INSIDE THE PLANT AREA OR IN CAB OF DELIVERY TRUCKS.

3. Check connections, manifolds, and valves, verifying that product to be unloaded will be pumped or unloaded into the correct tank.

4. Gauge the contents of the receiving tank to be sure it can accommodate the quantity that to be unloaded to prevent possible overfilling.

5. Close all tank gauge openings and / or fill caps except those that will have hoses connected to them, so as to prevent overflows.

6. Place drip pans under hose connections and make proper hose connections:

NOTE: A VISUAL INSPECTION OF UNLOADING HOSES SHOULD BE MADE BEFORE OPENING UNLOADING VALVES TO CHECK FOR:

- Badly weathered or cracked hose.
- Deep cuts or abrasions on the hoses.
- Outer rubber jackets badly blistered.
- Ends of hose partly pulled out of the couplings.

NOTE: HOSES WHICH SHOW THESE DEFECTS SHOULD NOT BE USED.

7. Open all compartment emergency valves. If parked on an incline, be sure that the product does not spill out of compartment positive vents. If product is spilling out, close vent immediately and correct condition before proceeding to unload.

8. Open proper valves on tank vehicle and tank, and start delivery of product.

9. Immediately check all connections for leaks. If leaks are found, stop the unloading operation and make the necessary repairs before continuing the process.

CAUTION: WHERE DELIVERIES ARE BEING PUMPED OFF, HOSES ARE UNDER PRESSURE AND EXTRA PRECAUTIONS SHOULD BE TAKEN TO CONTINUALLY OBSERVE HOSES FOR LEAKS OR RUPTURE.

10. **DO NOT LEAVE THE VEHICLE DURING DELIVERY.** Be Alert. Remain in a position to observe the hose connections, vents and general area. Stay where you can quickly reach the unloading valve, nozzle, or compartment emergency valve, so you could stop the product flow immediately in an emergency. If necessary to leave the unloading process, the pumps should be stopped and the valves closed.

11. Check storage tank vents throughout the delivery for proper venting. If the vent sprays any liquid or oils, stop unloading and report the condition to your supervisor.

12. When unloading is completed inspect all compartments to make sure that they are empty. Allow the pump to run long enough to empty unloading lines and hoses.

13. Upon completion of delivery, close unloading valves. Disconnect and drain hoses from tank vehicle and empty drip pans.

14. Replace all fill caps and gauge covers securely. Replace or report missing or worn gaskets.

15. Close all compartments emergency valves by use of the remote releases.

16. Close all compartments doors and fasten hose tube ends properly.

17. Make visual safety inspection of vehicle by completely walking around it. If tank truck, drive way slowly with caution.

II. Loading Into Tank Truck

A. Use Of The Loading Hoses

The maximum number of loading hoses that you can safely operate at one time depends on the design of the loading rack.

If the rack meters are equipped with preset-stop mechanisms, you can safely operate two or more loading hoses simultaneously. This applies to either top or bottom loading.

When product is controlled by manually operated valves, you can safely operate no more than two loading hoses simultaneously provided you can adequately see into the two compartments being filled. Topping off of compartments must be done one at a time. Manually operated loading valves must be controlled only by hand. Never block or tie open a manually operated valve.

B. Loading Procedures

1. Secure instructions from the dispatcher.
2. Drive truck to loading rack as directed.
3. Shut off engine, all lights and electrical accessories.

NOTE: NEVER RACE THE ENGINE OR LEAVE THE THROTTLE OPEN WHEN CUTTING OFF THE IGNITION. THIS CAN FLOOD A HOT MUFFLER WITH UNBURNED GASES, WHICH CAN BE IGNITED BY BLOWING DEPOSITS INTO THE MUFFLER. A FLASH OR FLAME COMING OUT OF THE TAIL PIPE AS A RESULT OF ENGINE BACKFIRING HAS CAUSED SERIOUS LOADING RACK FIRES.

4. Set the parking brake and chock wheels.

5. Ground the vehicle by attaching grounding clamp to knurled stud provided on the truck.

DO NOT LOAD WITHOUT GROUNDING THE TRUCK.

6. Where provided set counters on loading rack meters to zero. For meters equipped with preset-stop mechanisms, set counter for amount to be loaded into compartments.

7. Where provided lower hinged platform or stairs to bridge loading rack on top of truck.

8. Open all dome covers cautiously. Make certain that vapor pressures are relieved before fully opening.

9. Be sure compartments are empty and the compartment emergency valves are set properly.

10. Close all dome covers except those on compartments to be immediately loaded.

11. Make the connection between the transport trailer and the loading pump.

NOTE: Do not try to "stretch" the loading hoses and stress connection points. If you cannot properly reach a connection without stress on the hose or the connection point, MOVE YOUR TRUCK. Do not move your vehicle under any circumstances with a hose connected or with a tote cover open or tank connection still in place.

12. If required, hold loading valve open by hand unless preset-stop mechanisms on meter are provided. Tying down or blocking valves open is always prohibited. Be prepared to quickly shut off flow of product in an emergency.

13. Fill the compartment to desired quantity.

14. After filling a compartment, remove loading hose carefully

15. Close all dome covers securely.

16. Return loading hose to the proper position.

17. Replace all caps on connections.

18. Detach grounding clamp and return grounding cable to proper storage position.

19. Make a quick visual safety inspection of vehicle before entering cab.

20. If all is in order, start the engine. Wait for air pressure, oil pressure, and other gauges to show normal.

21. With caution, drive away slowly.

III. Personnel

A. All personnel are to be instructed in the following Spill Prevention Control and Countermeasure Plans.

1. No tanks or compartments are to be filled without first checking the reserves on hand.

2. No pumps are to be operated unless attended continuously.

DRIVERS WILL BE IN ATTENDANCE AT ALL TIMES WHILE LOADING OR UNLOADING PRODUCT.

3. Instructions will be held on Spill Prevention, Containment and Retrieval methods.

4. Instructions and phone numbers are to be posted in the office in regard to reporting all spills.

3.4 INCIDENT INVESTIGATION

A. Coastal Chemical Co., L.L.C. will investigate and report on all incidents of chemical spills, releases, accidents and near misses of any kind. An action plan for corrective action will be developed and implemented to prevent reoccurrence.

B. Investigations are initiated as promptly as possible, but no later than 48 hours following the incident.

C. The incident investigation team includes as a minimum:
- The employee involved in the incident, if able.
- At least one employee knowledgeable in the process of operation involved in the incident.
- A contractor representative, if the incident involved work of a contractor.
- Facility Manager

D. The incident investigation report is an ISO form GOF100-02 or RDP Quality Record # 001-08. If the situation involves DOT, then a DOT form 5800.1 will also be used.

E. The Facility Manager is responsible for addressing Incident Investigation Report Findings.

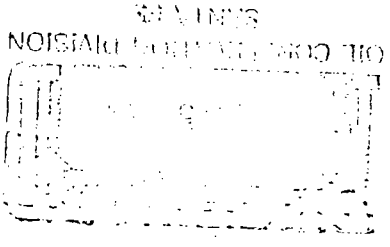
F. Resolutions and corrective actions are documented as appendices to the original Incident Investigation Report, and filed with that report. Incident investigation reports are retained for five years.

G. Facility Managers ensure that Incident Investigation Reports are reviewed with all affected personnel, whose job tasks are relevant to the incident findings, including contract employees where applicable. This review is considered a Safety meeting and is documented through Safety Meeting Minutes, which are a Quality Record.

OC12

#12

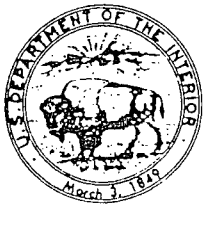
AVAILABILITY OF HYDROLOGIC DATA IN SAN JUAN COUNTY, NEW MEXICO



U.S. GEOLOGICAL SURVEY
Open-File Report 84-608

Attachment No. 3
Coastal Chemical Inc.
GW-222

Prepared in cooperation with
SAN JUAN COUNTY COMMISSION, NEW MEXICO



AVAILABILITY OF HYDROLOGIC DATA IN SAN JUAN COUNTY, NEW MEXICO

By

R. L. Klausing and G. E. Welder

ABSTRACT

Information collected in San Juan County, New Mexico, at 1,877 water wells, 39 streamflow-gaging stations, and 172 springs are presented. The collection sites and geology are shown on a base map with a scale of 1 inch = 2 miles.

INTRODUCTION

San Juan County is in the northwestern corner of New Mexico (fig. 1). Surface water from the San Juan, Animas, and La Plata Rivers has been a principal source of water for the county, but the water in these streams is fully appropriated. Ground water is present in San Juan County in several bedrock formations and in the alluvium of the river valleys.

The purpose of this report is to describe the types of hydrologic data that have been collected in San Juan County, to present examples of the data, to show the locations of the data-collection sites, and to indicate where more complete records may be obtained. This report is intended to serve as a data base that may be helpful in assessing the quantity, quality, and availability of the county's water resources.

The study was conducted by the U.S. Geological Survey in cooperation with the San Juan County Commission from July 1, 1983 to July 1, 1984.

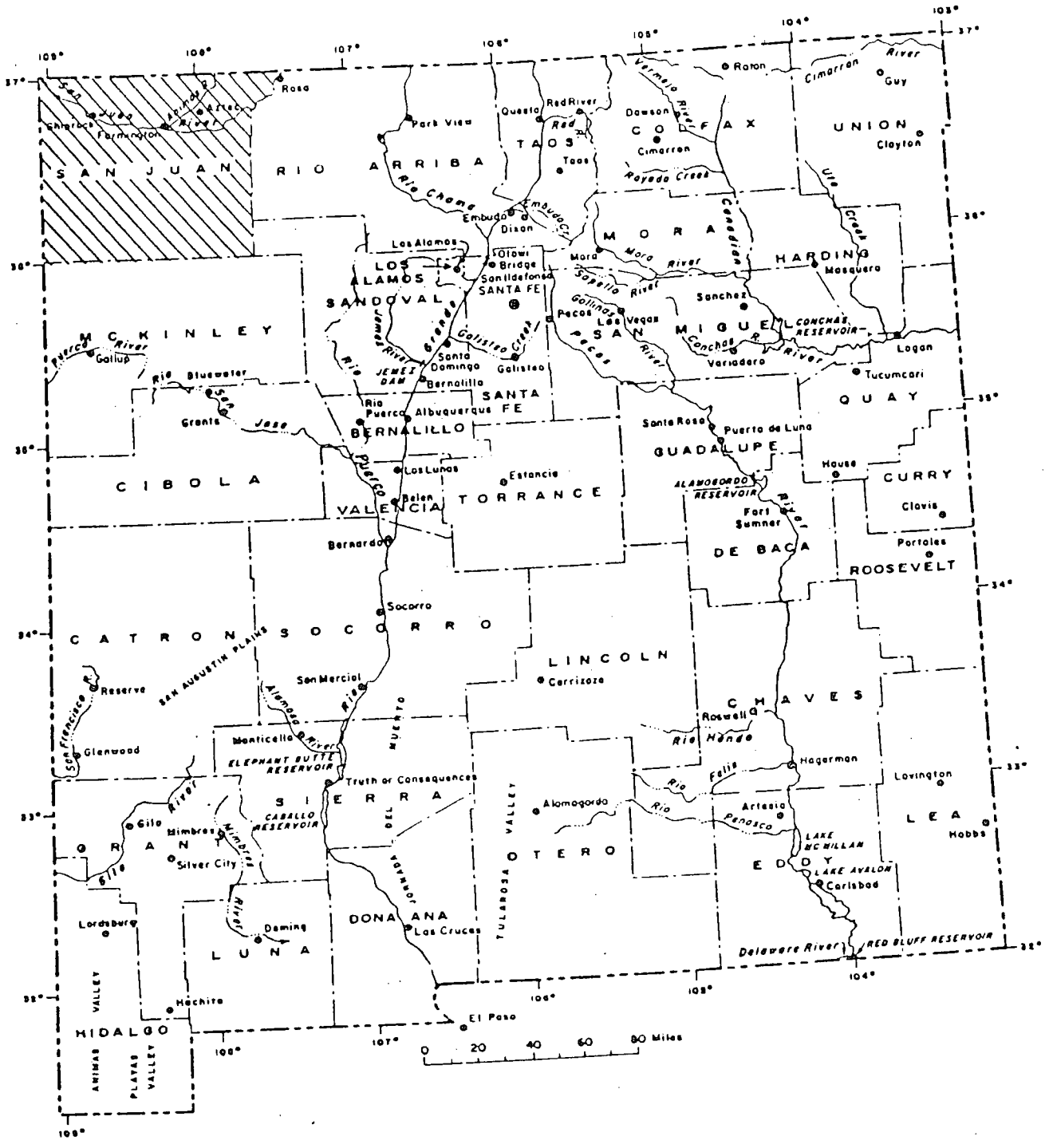


Figure 1.--Location of San Juan County, New Mexico.

PRESENTATION OF THE DATA

Information is presented in this report about water wells, springs, and streamflow-gaging stations in San Juan County. The locations and descriptive information for 1,877 wells, 172 springs, and 39 streamflow-gaging stations are listed in the tables. The locations of wells and gaging stations are shown on plate 1, as are springs with yields exceeding 10 gallons per minute. The generalized distribution of geologic formations that are exposed at the land surface is also shown on plate 1.

The hydrologic information in table 1 is a duplication of some of the data that were compiled by the U.S. Geological Survey for table 1 of the report by Stone and others (1983). Table 1 is a compilation of information on wells and springs that were in existence in San Juan County prior to 1978. Included in the table are 887 wells and 172 springs; 406 wells and 144 springs are on the Navajo Indian Reservation in the western half of the county. The lines at the left margin of table 1 indicate wells or springs that are a few miles outside of the county; this information may be useful in defining hydrologic conditions near the eastern or southern county boundaries.

Hydrologic data furnished by the New Mexico State Engineer Office are included in table 2. The data are preliminary and subject to revision. Generally, the wells listed in this table were drilled from 1978 to 1983. Included in the table are 990 wells in San Juan County; 43 wells are in the western half of the county on the Navajo Indian Reservation. Most of the wells in the vicinity of the towns of Bloomfield, Farmington, and Aztec are shallow domestic wells drilled in the Animas, La Plata, and San Juan River valleys. The lines at the left margin of table 2 indicate wells that are a few miles east of the county; this well data may be useful in defining hydrologic conditions near the eastern boundary of the county.

Descriptions of 39 streamflow-gaging stations are listed in table 3. Twenty-one of the stations were active in 1984 and the remainder were in use at various times in the past. The stations are located on the Animas, Chaco, La Plata, and San Juan Rivers, and their tributaries which flow through San Juan County. Twenty-eight of the stations are located in San Juan County, New Mexico, four in McKinley County, New Mexico, six in Colorado, and one in Utah. The descriptions include a detailed location, the size of the drainage area upstream from the station, the period of record, the type and altitude of the gage, miscellaneous remarks concerning the quality of the record and the availability of water-quality data, and the average and extreme discharges. Daily discharges are given for the 1982 water year (October 1, 1981, through September 30, 1982) or the last year of record for a discontinued station. The stations listed in the table are the principal collection sites for surface-water data published by the U.S. Geological Survey.

Additional information about many of the wells listed in tables 1 and 2 is available from the sources given in table 1 and from the U.S. Geological Survey and the State Engineer Office in Albuquerque, New Mexico. Stream-discharge data for the period of record of the 39 stations listed in table 3 are available from computer files of the U.S. Geological Survey. Water-quality data that have been collected at the wells and streamflow-gaging stations indicated by the solid symbols on plate 1 are also available from the U.S. Geological Survey or the New Mexico Bureau of Mines and Mineral Resources in Socorro.

USE OF THE MAP AND DATA TABLES

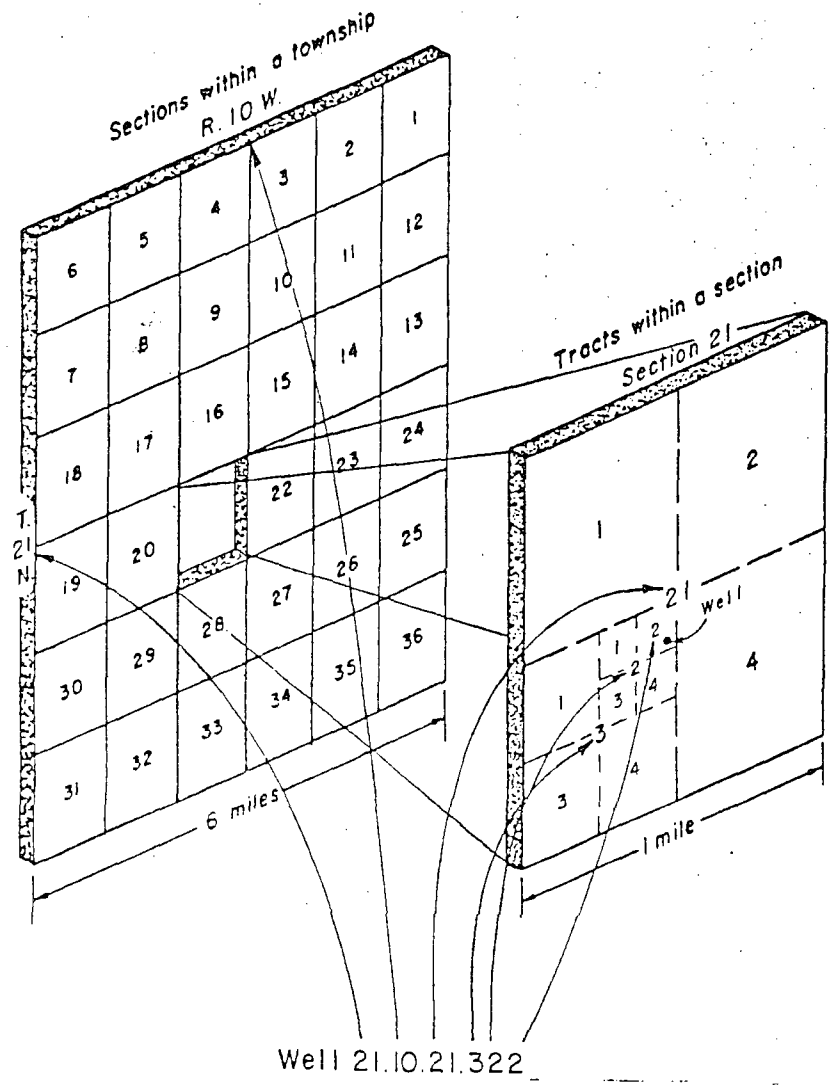
The locations where hydrologic data have been collected are shown on plate 1. The hydrologic conditions at a known well site, for example, may be projected to an adjacent site where new water supplies might be needed, if geologic conditions are similar. Such extrapolations, however, need to be made with caution.

The stream-discharge data given in table 3 (station locations on plate 1) provide information on streamflow characteristics, such as average and peak flows and surface-water quality. This information may be used to determine the relative amounts of water than can be delivered to surface-water users, to estimate quantities of water that may be available for future use, to determine high- and low-water stream stages, and to aid in designing roads, bridges, and other structures.

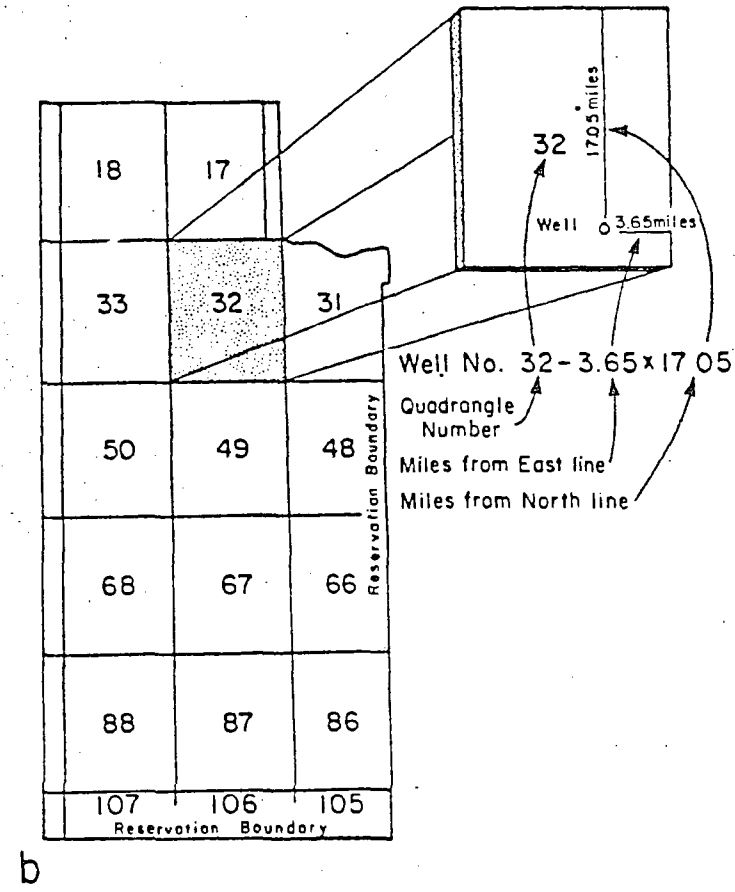
WELL-NUMBERING SYSTEMS

Two numbering systems are used in this report to locate a well. The first uses the common subdivision of lands into townships, ranges, and sections. In this system, the location number is divided into four segments separated by periods. The first segment indicates the township north of the New Mexico Base Line and the second denotes the range west of the New Mexico Principal Meridian. The third segment indicates the section within the township and the fourth segment indicates the tract within which the well is located. To determine the fourth segment of the location number, the section is divided into quarters numbered 1, 2, 3, and 4 for the NW¼, NE¼, SW¼, and SE¼ respectively. The quarter section may be further subdivided in a similar manner. The number of digits in the fourth segment of the location number indicates the degree of accuracy in locating the well. One digit indicates the location only could be determined to a 160-acre tract; two digits, 40-acre tract; three digits, 10-acre tract; and four digits, 2½-acre tract. A well with a location number 21.07.28.213 is located in the southwest ¼ of the northwest ¼ of the northeast ¼ of section 28, Township 21 North Range 7 West (fig. 2).

A different numbering system is used for the main part of the Navajo Reservation. This area is divided into 15-minute quadrangles, each of which is assigned a number. The well number consists of the quadrangle number followed by the distance in miles from the east line and the distance in miles from the north line, in that order. Thus, a well numbered 32 - 3.65 x 17.05 is in quadrangle number 32, 3.65 miles from the east line and 17.05 from the north line as shown in figure 2.



Township and Range System of numbering wells in New Mexico



System of numbering wells on the Navajo Indian Reservation

Figure 2.--Well-numbering systems.

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Wright, A. F., 1979, Bibliography of the geology and hydrology of the San Juan Basin, New Mexico: U.S. Geological Survey Bulletin 1481, 123 p.

Table 1.--Records of water wells and springs in San Juan County prior to 1978

EXPLANATION

LOCATION.--The location of a well or spring is described by using the system of quartering by sections (example: 24.13.9.134) or the numbering system for the Navajo Reservation (example: 33-7.16x8.96). The systems are explained in the text and shown in figure 2. All locations are defined as accurately as possible with the information available.

LATITUDE-LONGITUDE.--Latitude and longitude are reported in degrees, minutes, and seconds (example: 363010 1084525 = lat 36° 30' 10" N, long 108° 45' 25" W). If the exact location of a well or spring is unknown, the latitude and longitude at the center of the smallest subdivision of a section as indicated in the location number is given. Latitudes and longitudes were not computed for sites that could not be located more accurately than a quarter section.

NUMBER OR NAME.--The number or name assigned to a well may be the owner's name or number, the BIA or Navajo name or number, a traditional name, or the name of a nearby landmark. Springs and dug wells are identified under this heading.

DEPTH.--Depth is the total depth of a well (in feet) below land surface that was obtained from driller's records, measured (M) by U.S. Geological Survey, reported by individuals, or estimated (E). Wells that have been plugged back or deepened have the original depth noted in "Remarks". If the depth is questionable, it is marked with a "Q".

ALTITUDE.--Altitude of the land surface (in feet) above sea level at the well or spring. If an altitude was not recorded in field data or a location was not precise, the altitude reported was at the center of the smallest subdivision of a section as indicated in the location number. Altitudes are estimated (E) at sites with vague locations.

DEPTH TO WATER.--Depth to water below land surface (in feet). Values with decimal point accuracy were measured, others reported (R) or estimated (E). A plus sign (+) indicates the water level is above the land surface. "F" indicates the well was flowing on the date given.

DATE.--The date given is that of the water-level measurement noted on the same line. If no water level is noted, a date in this column is given to establish the well's existence at that particular time.

PRODUCING INTERVAL.--Producing interval is the depth (in feet) below land surface in the well that is open to the water-bearing unit.

PRINCIPAL WATER-BEARING UNIT(S).--The abbreviations of the geologic formation(s) that contain the water-bearing units are as follows:

Quaternary:
- Qal - Alluvium
- Qc - Colluvium (landslide, talus)

Tertiary:
- Tc - Chuska Sandstone
- Tsq - San Jose Formation
- Tn - Nacimiento Formation

Tertiary-Cretaceous:
- TKoa - Ojo Alamo Sandstone
- TKi - Intrusives

Cretaceous:
- Kk - Kirtland Shale
- Kkm - Farmington Sandstone Member
- Kkf - Kirtland Shale, Fruitland Formation, undivided
- Kf - Fruitland Formation
- Kpc - Pictured Cliffs Sandstone
- Kch - Cliff House Sandstone
- Kmf - Menefee Formation
- Kpl - Point Lookout Sandstone
- Kg - Gallup Sandstone
- Kd - Dakota Sandstone

Jurassic:
- Jm - Morrison Formation
- Jmb - Brushy Basin Shale Member
- Jmw - Westwater Canyon Sandstone Member
- Jmr - Recapture Shale Member
- Jms - Salt Wash Sandstone Member
- Jb - Bluff Sandstone
- Js - Summerville Formation
- Je - Entrada Sandstone

Triassic:
- T w - Wingate Sandstone

Permian:
- Pdc - De Chelly Sandstone

Pennsylvanian:
- Penn - Pennsylvanian rocks undivided

SPECIFIC CONDUCTANCE.--Specific conductance of the water, which is a function of dissolved solids, is reported in micromhos per centimeter at 25° Celsius. An asterisk (*) indicates that a chemical analysis of common constituents is reported in table 2 of Stone and others (1983). A double asterisk (**) indicates that an analysis, which includes trace elements, is reported in table 3 of Stone and others (1983).

DATE.--The sampling date.

LOGS AVAILABLE.--The types of logs available are indicated below. Many are in the files of the U.S. Geological Survey.

DLR, driller; TOP, formation tops; COR, core analysis; SAND, sand analysis; LTH, lithologic logs; N, neutron; GR, gamma ray; RES, resistivity; IND, induction; MIC, microlog; SP, spontaneous potential; DEN, density; CAL, caliper

REFERENCE.--Much of the data in this table was compiled from sources listed below. Lower case letters indicate the sources as follows:

h, Waring and Andrews (1935); j, Baltz and West (1967); l, Shomaker, J. W., (U.S. Geological Survey) (written commun., 1967); m, Rapp (1959); n, Callahan and Harshbarger (1955); o, Halpenny and Harshbarger (1950); q, Kister and Hatchett (1963); r, Davis, Hardt, Thompson, and Cooley (1963); s, Brimhall (1973); u, Kelly (1977); a*, Shomaker (1976); c*, Brown and Stone (1979).

DRAWDOWN, DISCHARGE, DURATION.--These values are reported unless followed by an asterisk (*) which indicates that more complete aquifer-test data are available in table 4 of Stone and others (1983). Discharges are reported (R), measured (M), or estimated (E); artesian flow is indicated by "F".

REMARKS.--This column may include the following abbreviations:

R, reported; M, measured by U.S. Geological Survey; E, estimated; DST, drill-stem test; Q, quadrangle or questionable, depending on context; WBF, water-bearing formation; QW, quality of water; SWL, static water level; F, flow or flowing; WL, water level; SPC, specific conductance in micromhos at 25° Celsius, TDS, dissolved solids in milligrams per liter; TD, total depth.

FORMATION CONTACT -- Approximately located

HYDROLOGIC DATA EXPLANATION

$\frac{20}{Qal}$ WATER WELL--Number is depth of well below land surface, in feet; letters indicate geologic source of water. (See principal water-bearing unit(s) in table 1, and aquifer in table 2.)

$\underline{2}$ $\underline{32x}$ WATER WELLS--Underlined symbol with number indicates the number of closely spaced wells at one location. Number with "x" is the number of wells in that section (one square mile)

◎ OBSERVATION WELL--Water-level measurements have been made periodically*

σ_{Tc} SPRING--Discharge generally greater than 10 gallons per minute (tables 1 and 2); letters indicate probable geologic source of water. (See geologic formation abbreviation in tables 1 and 2.)

$\triangle^{12}$ STREAMFLOW GAGING STATION--Active in 1982; number refers to station description and period of record in table 3*

STREAMFLOW GAGING STATION--Discontinued prior to 1982, number refers to station description and period of record in table 3

NOTE: Solid symbols (● ▲) indicate water-quality data are available *

* Ground-water level and surface-water discharge measurements, and water-quality data available from Water Resources Division of U.S. Geological Survey, Albuquerque, New Mexico.

Coastal Chemical - GW-222

Table 1.--Records of water wells and springs in San Juan County prior to 1978 - Continued

Location	Latitude-Longitude	Number or name	Depth (feet)	Altitude (feet)	Depth to Water (feet)	Date	Producing interval (feet)	Principal water-bearing unit(s)	Specific conductance (umhos at 25°C)	Date	Logs available	Reference	Drawdown (feet)	Discharge (gal/min)	Duration (hours)	Remarks
29.11.25.132	364158 1075653	Bur. Rec. #39	10M	5,470	1.8	04-16-68	-	Tn	6,300	04-16-68	-	-	-	-	-	-
29.11.30.211	364212 1080152	Narciso Archibeque	46	5,465	43	-	-	Qal	748 *	04-09-68	-	-	-	-	-	-
29.11.30.233	364152 1080152	Delbert Blake	9M	5,390	8.8	04-09-68	-	Qal	886 *	04-09-68	-	-	-	-	-	-
29.11.31.3321	364043 1080217	-	1,720	5,437	-	-	-	Kpc	-	-	TOP	-	-	-	-	Converted to water.
29.11.31.3342	364037 1080214	Edgar Lund	600	5,458	29.1	10-09-74	300	TKoa	-	-	-	-	-	-	-	Oil test plugged back.
29.11.31.3424	364042 1080158	Richard Sego	326	5,480	-	-	-	TKoa	-	-	-	-	-	-	-	"Not fit to drink".
29.11.34.4144	364046 1075827	-	800	5,640	-	-	-	TKoa	-	-	TOP	-	-	-	-	Source for H_2O injected; plugged back from TD of 1,355 feet.
29.12.06.133	364521 1080847	George McColm	16	5,440	6	11-24-53	-	Qal	2,250 *	11-24-53	-	m	-	10	-	-
29.12.07.4133	364417 1080817	7th Day Avent Church	234	5,600	170.5	10-08-74	-	Kkf, TKoa	2,500	10-08-74	-	-	-	-	-	-
29.12.18	-	Pan Am Pet.	-	-	-	-	1,435-1,448	Kpc	- *	04-30-59	-	m	-	-	-	TDS = 29,800 mg/L, 1959.
29.12.19.3211	364242 1080833	Thomas F. Kirby	62	5,360	45.4	04-05-68	-	Qal	2,100	04-05-68	-	-	-	-	-	-
29.12.19.3231	364235 1080837	Thomas F. Kirby	44	5,350	32.1	04-05-68	-	Qal	900	04-05-68	-	-	-	-		- -
29.12.20	-	-	-	-	-	-	1,550	Kpc	- *	- -590	-	m	-	-	-	Analysis only. TDS = 30,200 mg/L, 1959.
29.12.20	-	Pan Am Pet.	1,415	5,457	-	-	1,378-1,388	Kpc	59,200 *	02-22-59	-	-	-	-	-	Gas well, sample from pit.
29.12.21.3	-	-	-	-	-	-	-	-	4,090 **	03-15-74	-	-	-	-	-	Analysis only.
29.12.28	-	Pan Am	-	-	-	-	-	Kpc	- *	04-30-59	-	-	-	-	-	Gas well; TDS 37,800 m
29.12.28.2111	364215 1080609	D. H. Brownlee	120	5,392	16.6	11-07-74	-	TKoa	-	-	-	-	-	-	-	Unused.
29.12.29	-	Pan Am	44	-	-	-	-	Qal	- *	04-30-59	-	m	-	-	-	Reported casing depth; TDS = 2,210 mg/L.
29.12.30	-	-	-	-	-	-	1,240	Kpc	- *	- -59	-	m	-	-	-	WBF depth = 1,240 ft; TDS = 45,600 mg/L.
29.12.33.2411	364111 1080553	-	850	5,360	F	10-21-74	-	Kkf	12,250	10-21-74	-	-	-	SE	-	Hammond Canal Well.
29.12.34.421	364056 1080450	Bureau of Reclamation	13M	5,370	5.3	04-17-68	-	Qal	2,950 *	04-17-68	-	-	-	-	-	Stovepipe casing.
29.12.34.4341	364036 1080500	Chas. Christianson	100	5,480	65.5	10-21-74	-	TKoa	-	-	-	-	-	-	-	-
29.12.35.342	364042 1080410	Bureau of Reclamation #26	6M	5,380	3.6	04-18-68	-	Qal	4,620 *	04-18-68	-	-	-	-	-	Stovepipe casing.

Depth to Groundwater ≈ 50'

TDS (Total Dissolved Solids) = 0.75 (2,100 + 900 / 2)

TDS = 1125 mg/L

Coastal chemical - GW-222

Table 1.--Records of water wells and springs in San Juan County prior to 1978 - Continued

Location	Latitude-Longitude	Number or name	Depth (feet)	Altitude (feet)	Depth to Water (feet)	Date	Producing interval (feet)	Principal water-bearing unit(s)	Specific conductance (umhos at 25°C)	Date	Logs available	Reference	Drawdown (feet)	Discharge (gal/min)	Duration (hours)	Remarks
29.12.35.342a	364042 1080410	Bureau of Reclamation #27	6M	5,390	3.5	04-18-68	-	Qal	2,140 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.35.3434	364034 1080412	J. L. Mangum	74M	5,415	45.2	04-09-68	-	Qal	2,230 *	04-09-68	-	-	-	-	-	-
29.12.35.344	364035 1080408	Bureau of Reclamation #28	14M	5,400	9.9	04-18-68	-	Qal	2,190 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.35.4443	364033 1080339	E. D. Brimhall	50	5,420	28.0	10-09-74	-	Qal	4,020	10-09-74	-	-	-	-	-	-
29.12.36.144	364102 1080305	Bureau of Reclamation #88	9M	5,390	7.8	04-18-68	-	Qal	5,620 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.36.311	364055 1080330	Bureau of Reclamation #23	13M	5,385	6.1	04-18-68	-	Qal	1,410 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.36.311a	364055 1080330	Bureau of Reclamation #89	7M	5,380	1.8	04-18-68	-	Qal	10,500 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.36.332	364042 1080322	Bureau of Reclamation #22	18M	5,405	14.3	04-18-68	-	Qal	872 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.36.4343	364034 1080249	C. J. Burnham	280	5,425	40	10-10-74	-	TKoa	4,700	10-10-74	-	-	-	-	-	-
29.13	-	Brimhall Ranch	365	-	280	07-21-52	-	-	-	-	-	-	-	3	-	-
29.13.1Q	-	H. L. Baily	-	-	-	-	-	Kk	-	-	-	m	-	-	-	-
29.13.7.1442	364430 1081450	Dept. of Interior	72	5,250	17.6	10-29-74	-	Kk	5,200	11-05-65	-	-	-	-	-	-
29.13.11.221	364450 1081008	F. L. Lee	125	5,380	15	02-19-59	-	Kk, Qal	1,000 *	02-19-59	-	m	-	-	-	-
29.13.12.2344	364428 1080912	Dr. Williams	250M	5,566	-	-	-	Kk	-	-	-	-	-	-	-	Well is plugged with sand.
29.13.12.3441	364406 1080930	Full Gospel Revival	140	5,470	59.0	10-07-74	-	Kk	-	-	-	-	-	-	-	Poor producer; water is hauled in.
29.13.14.443	364312 1081010	Dowell Inc.	100	5,330	15	02-23-59	90-100	Kk, Qal	901 *	02-23-59	-	m	-	-	-	-
29.13.15.324	364325 1081138	Carl Kennedy	40	5,305	8	02-23-59	-	Qal	929 *	02-23-59	-	m	-	-	-	-
29.13.15.413	364325 1081130	McCormick School	80	5,315	8	02-23-59	-	Qal	598 *	02-23-59	-	m	-	-	-	Sample questionable.
29.13.17.441	364319 1081322	An Navajo Mission	35	5,420	6	02-23-59	-	Qal	-	-	-	m	-	-	-	Analysis incomplete.
29.13.18.2414	364342 1081425	-	959	5,249	-	-	-	-	-	-	TOP	-	-	-	-	Source for injection H_2O; plugged back.
29.13.28.2	-	O. J. Carson	10	5,300E	6	11-25-33	-	Qal	- *	11-25-33	-	m	-	-	-	-
29.13.36.322	364054 1080926	Spring	-	5,460	-	-	-	Tn	3,000	04-10-68	-	-	-	-	-	No discharge observed 4-10-68.
29.14.02.1422	364533 1081642	Locke Arroyo Well	56M	5,460	46.4	11-19-74	-	Kk	-	-	-	-	-	-	-	Abandoned.

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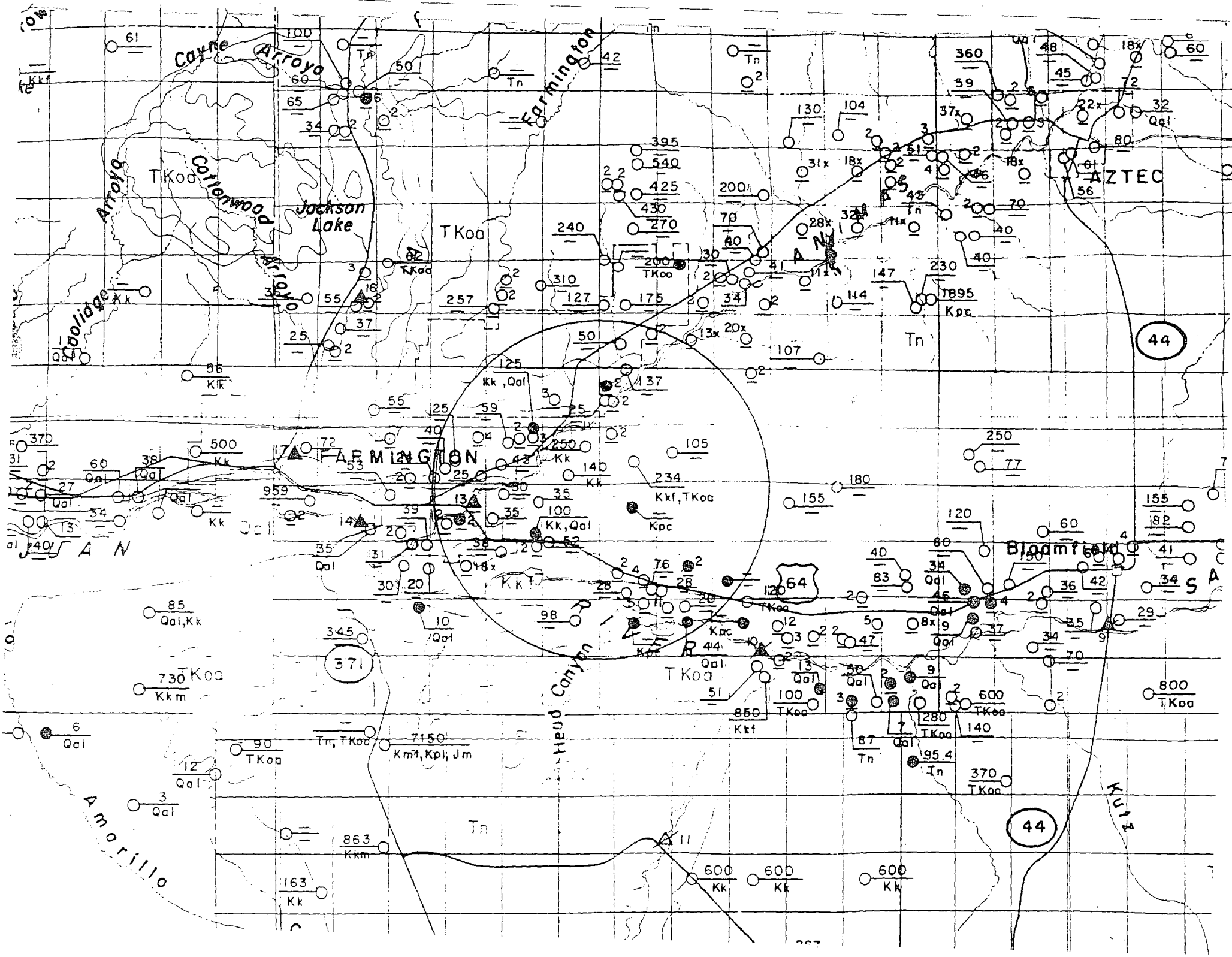
Table 2.--Records of water wells in San Juan County, 1978-83 - Continued

LOCATION	NAME	WELL NUMBER	USE	DEPTH	PERFORATIONS	AQUIFER
29.13.11.231	Hodges, Robert E.	SJ-0310	dom	45		
29.13.11.3	Deyapp, Lawrence	SJ-0301	dom, stk	43		
29.13.14.1	Tenski, Steve L.	SJ-0716	dom	30		
29.13.14.24	Rice, Ivan M.	SJ-1635	dom	35		
29.13.14.313	Valley Drive In Inc.	SJ-0176	dom, stk	35	28-34	
29.13.15.3	El Paso Natural Gas	SJ-0030	ind	29		
29.13.15.3	El Paso Natural Gas	SJ-0031		75		
29.13.16.34	Drake, J. A.	SJ-0453	stk	44		
29.13.16.344	Bell, Llyod	SJ-1443	dom, stk	40		
29.13.18.322	Lower Valley MDWCA	SJ-0172	exp	30		
29.13.18.322	Lower Valley MDWCA	SJ-0172-X	exp	30'		
29.13.21.21	Garcia, James	SJ-0167	dom	31	19-25	
29.13.21.22	Graham, Feliberto	SJ-1689	dom	39		
29.13.21.422	Vigil, Horacio	SJ-0737	dom, stk	20		
29.13.22.134	Maestas, Florencio E	SJ-0891	dom	33		
29.13.22.14	Esparza, Betty R.	SJ-1765	dom	39		
29.13.22.21	Graham, Arnold M.	SJ-0784	dom	43		
29.13.22.22	Burke, Dennis R.	SJ-1673	dom	46		
29.13.22.311	Sanchez, Benny	SJ-0719	dom, stk	23		
29.13.22.312	Denny, Lee L.	SJ-0757	dom	32		
29.13.22.313	D'A Gastino, Peter	SJ-0725	dom	26		
29.13.22.313	Freeman, David R.	SJ-0724	dom	28		
29.13.22.314	Head, Harry	SJ-1151	dom	32		
29.13.22.314	Norton, Emmett	SJ-1525	dom	35		
29.13.22.34	Kimbell, Lloyd	SJ-0972	dom,stk	35		
29.13.23.1	Kannard, Tom	SJ-1562	dom	38		
29.13.23.22	Barkley, Mary A.	SJ-0352	dom	62		
29.13.23.22	Pratt, Tim	SJ-1376	dom	15		
29.13.24.111	Neidish, Raymond W.	SJ-1087	irr	52		
29.13.25.233	Bolack, Tommy	SJ-1665	dom	98		
29.13.29.4	Four States Televisi	SJ-1371	san	345		
29.14.06.333	Hansen, Paul F.	SJ-1407	dom	70		
29.14.07.11	Helmer, Grodon	SJ-1568	dom	72		
29.14.07.113	Swearingen, Jack M.	SJ-0226	dom, stk	100		
29.14.07.413	Harris, Lowell	SJ-0451	dom,stk	24		
29.14.08.	Sterling, Hugh	SJ-0947	dom, stk	370		


Cayne Arroyo
Farmington
Arroyo
Cottonwood
Arroyo
Jackson Lake
Coolidge
TKoa
Tn
FARMINGTON
AZTEC
Bloomfield
SAN JUAN
Kk
Qal
Kkf
Kkm
Kpc
Kmf, Kpl, Jm
Tn, TKoa
Kk, Qal
Kkf, TKoa
Qal, Kk
Head Canyon
Amarillo
44
64
371

Appendix D

XIII. A.

GUIDELINES

FOR

REMEDIATION

OF

LEAKS, SPILLS AND RELEASES

Attachment No. 4
Coastal Chemical Inc.
GW-222

New Mexico Oil Conservation Division

INTRODUCTION

The following document is to be used as a guide on all federal, state and fee lands when remediating contaminants resulting from leaks, spills and releases of oilfield wastes or products. The New Mexico Oil Conservation Division (OCD) requires that corrective actions be taken for leaks, spills or releases of any material which has a reasonable probability to injure or be detrimental to public health, fresh waters, animal or plant life, or property or unreasonably interfere with the public welfare or use of the property. These guidelines are intended to provide direction for remediation of soils and fresh waters contaminated as a result of leaks, spills or releases of oilfield wastes and products in a manner that assures protection of fresh waters, public health and the environment.

Fresh waters (to be protected) includes the water in lakes, playas, surface waters of all streams regardless of the quality of the water within any given reach, and all underground waters containing 10,000 milligrams per liter (mg/l) or less of total dissolved solids (TDS) except for which, after notice and hearing, it is found that there is no present or reasonably foreseeable beneficial use which would be impaired by contamination of such waters. The water in lakes and playas shall be protected from contamination even though it may contain more than 10,000 mg/l of TDS unless it can be shown that hydrologically connected fresh ground water will not be adversely affected.

Procedures may deviate from the following guidelines if it can be shown that the proposed procedure will either remediate, remove, isolate or control contaminants in such a manner that fresh waters, public health and the environment will not be impacted. Specific constituents and/or requirements for soil and ground water analysis and/or remediation may vary depending on site specific conditions. Deviations from approved plans will require OCD notification and approval.

****** Note: Notification to OCD of leaks, spills and releases does not relieve an operator of responsibility for compliance with any other federal, state or local law and/or regulation regarding the incident. Other agencies (ie. BLM, Indian Tribes, etc) may also have guidelines or requirements for remediation of leaks spills and releases.**

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I. NOTIFICATION OF LEAK, SPILL OR RELEASE

Leaks, spills and releases of any wastes or products from oilfield operations are required to be reported to the OCD pursuant to OCD Rule 116 (Appendix A) or New Mexico Water Quality Control Commission (WQCC) Regulation 1-203 (Appendix B). Appendix C contains the phone numbers and addresses for reporting incidents to the OCD district and Santa Fe offices. Notification will include all information required under the respective rule or regulation. Below is a description of some of the information required:

A. RESPONSIBLE PARTY AND LOCAL CONTACT

The name, address and telephone number of the person/persons in charge of the facility/operation as well as the owner and/or operator of the facility/operation and a local contact.

B. FACILITY

The name and address of the facility or operation where the incident took place and the legal location listed by quarter-quarter, section, township and range, and by distance and direction from the nearest town or prominent landmark so that the exact site location can be readily located on the ground.

C. TIME OF INCIDENT

The date, time and duration of the incident.

D. DISCHARGE EVENT

A description of the source and cause of the incident.

E. TYPE OF DISCHARGE

A description of the nature or type of discharge. If the material leaked, spilled or released is anything other than crude oil, condensate or produced water include its chemical composition and physical characteristics.

F. QUANTITY

The known or estimated volume of the discharge.

G. SITE CHARACTERISTICS

The relevant general conditions prevailing at the site including precipitation, wind conditions, temperature, soil type, distance to nearest residence and population centers and proximity of fresh water wells or watercourse (ie. any river, lake, stream, playa, arroyo, draw, wash, gully or natural or man-made channel through which water flows or has flowed).

H. IMMEDIATE CORRECTIVE ACTIONS

Any initial response actions taken to mitigate immediate threats to fresh waters, public health and the environment.

II. INITIAL RESPONSE ACTIONS

Upon learning of a leak, spill or release of any material which has a reasonable probability to injure or be detrimental to public health, fresh waters, animal or plant life, or property or unreasonably interfere with the public welfare or use of the property, the responsible party (RP) should take the following immediate actions unless the actions could create a safety hazard which would result in a threat to personal or public injury:

A. SOURCE ELIMINATION AND SITE SECURITY

The RP should take the appropriate measures to stop the source of the leak, spill or release and limit access to the site as necessary to reduce the possibility of public exposure.

B. CONTAINMENT

Once the site is secure, the RP should take steps to contain the materials leaked, spilled or released by construction of berms or dikes, the use of absorbent pads or other containment actions to limit the area impacted by the event and prevent potential fresh water contaminants from migrating to watercourses or areas which could pose a threat to public health and safety.

C. SITE STABILIZATION

After containment, the RP should recover any products or wastes which can be physically removed from the surface within the containment area. The disposition of all wastes or products removed from the site must be approved by the OCD.

III. SITE ASSESSMENT

Prior to final closure (Section VIII), soils into which nonrecoverable products or wastes have infiltrated and which have a reasonable probability to injure or be detrimental to public health, fresh waters, animal or plant life, or property or unreasonably interfere with the public welfare or use of the property should be assessed for their potential environmental impacts and remediated according to the procedures contained in the following sections. Assessment results form the basis of any required remediation. Sites will be assessed for severity of contamination and potential environmental and public health threats using a risk based ranking system.

The following characteristics should be determined in order to evaluate a sites potential risks, the need for remedial action and, if necessary, the level of cleanup required at the site:

A. GENERAL SITE CHARACTERISTICS

1. Depth To Ground Water

The operator should determine the depth to ground water at each site. The depth to ground water is defined as

the vertical distance from the lowermost contaminants to the seasonal high water elevation of the ground water. If the exact depth to ground water is unknown, the ground water depth can be estimated using either local water well information, published regional ground water information, data on file with the New Mexico State Engineer Office or the vertical distance from adjacent ground water or surface water.

2. Wellhead Protection Area

The operator should determine the horizontal distance from all water sources including private and domestic water sources. Water sources are defined as wells, springs or other sources of fresh water extraction. Private and domestic water sources are those water sources used by less than five households for domestic or stock purposes.

3. Distance To Nearest Surface Water Body

The operator should determine the horizontal distance to all downgradient surface water bodies. Surface water bodies are defined as perennial rivers, streams, creeks, irrigation canals and ditches, lakes, ponds and playas.

B. SOIL/WASTE CHARACTERISTICS

Soils/wastes within and beneath the area of the leak, spill or release should be evaluated to determine the type and extent of contamination at the site. In order to assess the level of contamination, observations should be made of the soils at the surface and samples of the impacted soils should be taken in the leak, spill or release area. Observations should note whether previous leaks, spills or releases have occurred at the site. Additional samples may be required to completely define the lateral and vertical extent of contamination. Soil samples should be obtained according to the sampling procedures in Sections V.A. and V.B. This may be accomplished using a backhoe, drill rig, hand auger, shovel or other means.

Initial assessment of soil contaminant levels is not required if an operator proposes to determine the final soil contaminant concentrations after a soil removal or remediation pursuant to section VI.A.

Varying degrees of contamination described below may co-exist at an individual site. The following sections describe the degrees of contamination that should be documented during the assessment of the level of soil contamination:

1. Highly Contaminated/Saturated Soils

Highly contaminated/saturated soils are defined as those soils which contain a free liquid phase or exhibit gross staining.

2. **Unsaturated Contaminated Soils**

Unsaturated contaminated soils are defined as soils which are not highly contaminated/saturated, as described above, but contain benzene, toluene, ethylbenzene and xylenes (BTEX) and total petroleum hydrocarbons (TPH) or other potential fresh water contaminants unique to the leak, spill or release. Action levels and sampling and analytical methods for determining contaminant concentrations are described in detail in Sections IV. and V.

**** **(NOTE: Soils contaminated as a result of spills, leaks or releases of non-exempt wastes must be evaluated for all RCRA Subtitle C hazardous waste characteristics. The above definitions apply only to oilfield contaminated soils which are exempt from federal RCRA Subtitle C hazardous waste provisions and nonexempt oilfield contaminated soils which are characteristically nonhazardous according to RCRA Subtitle C regulations. Any nonexempt contaminated soils which are determined to be characteristically hazardous cannot be remediated using this guidance document and will be referred to the New Mexico Environment Department Hazardous Waste Program.)**

C. **GROUND WATER QUALITY**

If ground water is encountered during the soil/waste characterization of the impacted soils, a sample should be obtained to assess the incidents potential impact on ground water quality. Ground water samples should be obtained using the sampling procedures in Section V.C. Monitor wells may be required to assess potential impacts on ground water and the extent of ground water contamination, if there is a reasonable probability of ground water contamination based upon the extent and magnitude of soil contamination defined during remedial activities.

IV. SOIL AND WATER REMEDIATION ACTION LEVELS

A. **SOILS**

The sections below describe the OCD's recommended remediation action levels for soils contaminated with petroleum hydrocarbons. Soils contaminated with substances other than petroleum hydrocarbons may be required to be remediated based upon the nature of the contaminant and it's potential to impact fresh waters, public health and the environment.

1. **Highly Contaminated/Saturated Soils**

All highly contaminated/saturated soils should be remediated insitu or excavated to the maximum extent practicable. These soils should be remediated using techniques described in Section VI.A to the contaminant specific level listed in Section IV.A.2.b.

2. Unsaturated Contaminated Soils

The general site characteristics obtained during the site assessment (Section III.A.) will be used to determine the appropriate soil remediation action levels using a risk based approach. Soils which are contaminated by petroleum constituents will be scored according to the ranking criteria below to determine their relative threat to public health, fresh waters and the environment.

a. Ranking Criteria

Depth To Ground Water	Ranking Score
<50 feet	20
50 - 99	10
>100	0

Wellhead Protection Area

<1000 feet from a water source,or; <200 feet from private domestic water source	
Yes	20
No	0

Distance To Surface Water Body

<200 horizontal feet	20
200 - 1000 horizontal feet	10
>1000 horizontal feet	0

b. Recommended Remediation Action Level

The total ranking score determines the degree of remediation that may be required at any given site. The total ranking score is the sum of all four individual ranking criteria listed in Section IV.A.2.a. The table below lists the remediation action level that may be required for the appropriate total ranking score.

(NOTE: The OCD retains the right to require remediation to more stringent levels than those proposed below if warranted by site specific conditions (ie. native soil type, location relative to population centers and future use of the site or other appropriate site specific conditions.)

	Total Ranking Score		
	>19	10 - 19	0 - 9
Benzene(ppm)*	10	10	10
BTEX(ppm)*	50	50	50
TPH(ppm)**	100	1000	5000

* A field soil vapor headspace measurement (Section V.B.1) of 100 ppm may be substituted for a laboratory analysis of the Benzene and BTEX concentration limits.

** The contaminant concentration for TPH is the concentration above background levels.

B. GROUND WATER

Contaminated ground water is defined as ground water of a present or foreseeable beneficial use which contains free phase products, dissolved phase volatile organic constituents or other dissolved constituents in excess of the natural background water quality. Ground water contaminated in excess of the WQCC ground water standards or natural background water quality will require remediation.

V. SOIL AND WATER SAMPLING PROCEDURES

Below are the sampling procedures for soil and ground water contaminant investigations of leaks, spills or releases of RCRA Subtitle C exempt oil field petroleum hydrocarbon wastes. Leaks, spills or releases of non-exempt RCRA wastes must be tested to demonstrate that the wastes are not characteristically hazardous according to RCRA regulations. Sampling for additional

constituents may be required based upon the nature of the contaminant which was leaked, spilled or released.

A. HIGHLY CONTAMINATED OR SATURATED SOILS

The following method is used to determine if soils are highly contaminated or saturated:

1. Physical Observations

Study a representative sample of the soil for observable free petroleum hydrocarbons or immiscible phases and gross staining. The immiscible phase may range from a free hydrocarbon to a sheen on any associated aqueous phase. A soil exhibiting any of these characteristics is considered highly contaminated or saturated.

B. UNSATURATED CONTAMINATED SOILS

The following methods may be used for determining the magnitude of contamination in unsaturated soils:

1. Soil Sampling Procedures for Headspace Analysis

A headspace analysis may be used to determine the total volatile organic vapor concentrations in soils (ie. in lieu of a laboratory analysis for benzene and BTEX but not in lieu of a TPH analysis). Headspace analysis procedures should be conducted according to OCD approved industry standards or other OCD-approved procedures. Accepted OCD procedures are as follows:

a) Fill a 0.5 liter or larger jar half full of sample and seal the top tightly with aluminum foil or fill a one quart zip-lock bag one-half full of sample and seal the top of the bag leaving the remainder of the bag filled with air.

b) Ensure that the sample temperature is between 15 to 25 degrees Celsius (59-77 degrees Fahrenheit).

c) Allow aromatic hydrocarbon vapors to develop within the headspace of the sample jar or bag for 5 to 10 minutes. During this period, the sample jar should be shaken vigorously for 1 minute or the contents of the bag should be gently massaged to break up soil clods.

d) If using a jar, pierce the aluminum foil seal with the probe of either a PID or FID organic vapor meter (OVM), and then record the highest (peak) measurement. If using a bag, carefully open one end of the bag and insert the probe of the OVM into the bag and re-seal the bag around the probe as much as possible to prevent vapors from escaping. Record the peak measurement. The OVM must be calibrated to assume a benzene response factor.

2. Soil Sampling Procedures For Laboratory Analysis

a. Sampling Procedures

Soil sampling for laboratory analysis should be conducted according to OCD approved industry standards or other OCD-approved procedures. Accepted OCD soil sampling procedures and laboratory analytical methods are as follows:

i) Collect samples in clean, air-tight glass jars supplied by the laboratory which will conduct the analysis or from a reliable laboratory equipment supplier.

ii) Label the samples with a unique code for each sample.

iii) Cool and store samples with cold packs or on ice.

iv) Promptly ship sample to the lab for analysis following chain of custody procedures.

v) All samples must be analyzed within the holding times for the laboratory analytical method specified by EPA.

b. Analytical Methods

All soil samples must be analyzed using EPA methods, or by other OCD approved methods and must be analyzed within the holding time specified by the method. Below are laboratory analytical methods commonly accepted by OCD for analysis of soil samples analyzed for petroleum related constituents. Additional analyses may be required if the substance leaked, spilled or released has been anything other than petroleum based fluids or wastes.

i) Benzene, toluene, ethylbenzene and xylene

- EPA Method 602/8020

ii) Total Petroleum Hydrocarbons

- EPA Method 418.1, or;
- EPA Method Modified 8015

C. GROUND WATER SAMPLING

If an investigation of ground water quality is deemed necessary, it should be conducted according to OCD approved industry standards or other OCD-approved procedures. The following methods are standard OCD accepted methods which

should be used to sample and analyze ground water at RCRA Subtitle C exempt sites (Note: The installation of monitor wells may not be required if the OCD approves of an alternate ground water investigation or sampling technique):

1. Monitor Well Installation/Location

One monitor well should be installed adjacent to and hydrologically down-gradient from the area of the leak, spill or release to determine if protectable fresh water has been impacted by the disposal activities. Additional monitor wells, located up-gradient and down-gradient of the leak, spill or release, may be required to delineate the full extent of ground water contamination if ground water underlying the leak, spill or release has been found to be contaminated.

2. Monitor Well Construction

a) Monitor well construction materials should be:

i) selected according to industry standards;

ii) chemically resistant to the contaminants to be monitored; and

iii) installed without the use of glues/adhesives.

b) Monitor wells should be constructed according to OCD approved industry standards to prevent migration of contaminants along the well casing. Monitor wells should be constructed with a minimum of fifteen (15) feet of well screen. At least five (5) feet of the well screen should be above the water table to accommodate seasonal fluctuations in the static water table.

3. Monitor Well Development

When ground water is collected for analysis from monitoring wells, the wells should be developed prior to sampling. The objective of monitor well development is to repair damage done to the formation by the drilling operation so that the natural hydraulic properties of the formation are restored and to remove any fluids introduced into the formation that could compromise the integrity of the sample. Monitoring well development is accomplished by purging fluid from the well until the pH and specific conductivity have stabilized and turbidity has been reduced to the greatest extent possible.

4. Sampling Procedures

Ground water should be sampled according to OCD accepted standards or other OCD approved methods. Samples should be collected in clean containers supplied by the laboratory which will conduct the analysis or from a reliable laboratory equipment supplier. Samples for

different analyses require specific types of containers. The laboratory can provide information on the types of containers and preservatives required for sample collection. The following procedures are accepted by OCD as standard sampling procedures:

a) Monitor wells should be purged of a minimum of three well volumes of ground water using a clean bailer prior to sampling to ensure that the sample represents the quality of the ground water in the formation and not stagnant water in the well bore.

b) Collect samples in appropriate sample containers containing the appropriate preservative for the analysis required. No bubbles or headspace should remain in the sample container.

c) Label the sample containers with a unique code for each sample.

d) Cool and store samples with cold packs or on ice.

e) Promptly ship sample to the lab for analysis following chain of custody procedures.

f) All samples must be analyzed within the holding times for the laboratory analytical method specified by EPA.

5. Ground Water Laboratory Analysis

Samples should be analyzed for potential ground water contaminants contained in the waste stream, as defined by the WQCC Regulations. All ground water samples must be analyzed using EPA methods, or by other OCD approved methods and must be analyzed within the holding time specified by the method. Below are OCD accepted laboratory analytical methods for analysis of ground water samples analyzed for petroleum related constituents. Additional analyses may be required if the substance leaked, spilled or release has been anything other than a petroleum based fluid or waste.

a. Analytical Methods

i.) Benzene, Toluene, Ethylbenzene and Xylene

- EPA Method 602/8020

ii.) Major Cations and Anions

- Various EPA or standard methods

iii.) Heavy Metals

- EPA Method 6010, or;
- Various EPA 7000 series methods

iv.) Polynuclear Aromatic Hydrocarbons

- EPA Method 8100

VI. REMEDIATION

The following discussion summarizes recommended techniques for remediation of contaminated soil and ground water as defined in Section IV.A. and IV.B. OCD approval for remediation of an individual leak, spill or release site is not required if the company is operating under an OCD approved spill containment plan. All procedures which deviate from the companies spill containment plan must be approved by OCD.

A. SOIL REMEDIATION

When RCRA Subtitle C exempt or RCRA nonhazardous petroleum contaminated soil requires remediation, it should be remediated and managed according to the criteria described below or by other OCD approved procedures which will remove, treat, or isolate contaminants in order to protect fresh waters, public health and the environment.

In lieu of remediation, OCD may accept an assessment of risk which demonstrates that the remaining contaminants will not pose a threat to present or foreseeable beneficial use of fresh waters, public health and the environment.

1. Contaminated Soils

Highly contaminated/saturated soils and unsaturated contaminated soils exceeding the standards described in Section IV.A. should be either:

a) Excavated from the ground until a representative sample from the walls and bottom of the excavation is below the contaminant specific remediation level listed in Section IV.A.2.b or an alternate approved remediation level, or;

b) Excavated to the maximum depth and horizontal extent practicable. Upon reaching this limit a sample should be taken from the walls and bottom of the excavation to determine the remaining levels of soil contaminants, or;

c) Treated in place, as described in Section VI.A.2.b.ii. - Treatment of Soil in Place, until a representative sample is below the contaminant specific remediation level listed in Section IV.A.2.b, or an alternate approved remediation level, or;

d) Managed according to an approved alternate method.

2. Soil Management Options

All soil management options must be approved by OCD. The following is a list of options for either on-site treatment or off-site treatment and/or disposal of contaminated soils:

a. Disposal

Excavated soils may be disposed of at an off-site OCD approved or permitted facility.

b. Soil Treatment and Remediation Techniques

i. Landfarming

Onetime applications of contaminated soils may be landfarmed on location by spreading the soil in an approximately six inch lift within a bermed area. Only soils which do not contain free liquids can be landfarmed. The soils should be disced regularly to enhance biodegradation of the contaminants. If necessary, upon approval by OCD, moisture and nutrients may be added to the soil to enhance aerobic biodegradation.

In some high risk areas an impermeable liner may be required to prevent leaching of contaminants into the underlying soil.

Landfarming sites that will receive soils from more than one location are considered centralized sites and must be approved separately by the OCD prior to operation.

ii. Insitu Soil Treatment

Insitu treatment may be accomplished using vapor venting, bioremediation or other approved treatment systems.

iii. Alternate Methods

The OCD encourages alternate methods of soil remediation including, but not limited to, active soil aeration, composting, bioremediation, solidification, and thermal treatment.

B. GROUND WATER REMEDIATION

1. Remediation Requirements

Ground water remediation activities will be reviewed and approved by OCD on a case by case basis prior to commencement of remedial activities. When contaminated

ground water exceeds WQCC ground water standards, it should be remediated according to the criteria described below.

a. Free Phase Contamination

Free phase floating product should be removed from ground water through the use of skimming devices, total-fluid type pumps, or other OCD-approved methods.

b. Dissolved Phase Contamination

Ground water contaminated with dissolved phase constituents in excess of WQCC ground water standards can be remediated by either removing and treating the ground water, or treating the ground water in place. If treated waters are to be disposed of onto or below the ground surface, a discharge plan must be submitted and approved by OCD.

c. Alternate Methods

The OCD encourages other methods of ground water remediation including, but not limited to, air sparging and bioremediation. Use of alternate methods must be approved by OCD prior to implementation.

VII. TERMINATION OF REMEDIAL ACTION

Remedial action may be terminated when the criteria described below have been met:

A. SOIL

Contaminated soils requiring remediation should be remediated so that residual contaminant concentrations are below the recommended soil remediation action level for a particular site as specified in Section IV.A.2.b.

If soil action levels cannot practicably be attained, an evaluation of risk may be performed and provided to OCD for approval showing that the remaining contaminants will not pose a threat to present or foreseeable beneficial use of fresh water, public health and the environment.

B. GROUND WATER

A ground water remedial action may be terminated if all recoverable free phase product has been removed, and the concentration of the remaining dissolved phase contaminants in the ground water does not exceed New Mexico WQCC water quality standards or background levels. Termination of remedial action will be approved by OCD upon a demonstration of completion of remediation as described in above.

VIII. FINAL CLOSURE

Upon termination of any required remedial actions (Section VII.) the area of a leak, spill or release may be closed by backfilling any excavated areas, contouring to provide drainage away from the site, revegetating the area or other OCD approved methods.

IX. FINAL REPORT

Upon completion of remedial activities a final report summarizing all actions taken to mitigate environmental damage related to the leak, spill or release will be provided to OCD for approval.

APPENDIX A

AND BLOWOUTS

A. The Division shall be notified of any fire, break, leak, spill, or blowout occurring at any injection or disposal facility or at any oil or gas drilling, producing, transporting, or processing facility in the State of New Mexico by the person operating or controlling such facility.

B. "Facility," for the purpose of this rule, shall include any oil or gas well, any injection or disposal well, and any drilling or workover well; any pipe line through which crude oil, condensate, casinghead or natural gas, or injection or disposal fluid (gaseous or liquid) is gathered, piped, or transported (including field flow-lines and lead-lines but not including natural gas distribution systems); any receiving tank, holding tank, or storage tank, or receiving and storing receptacle into which crude oil, condensate, injection or disposal fluid, or casinghead or natural gas is produced, received, or stored; any injection or disposal pumping or compression station including related equipment; any processing or refining plant in which crude oil, condensate, or casinghead or natural gas is processed or refined; and any tank or drilling pit or slush pit associated with oil or gas well or injection or disposal well drilling operations or any tank, storage pit, or pond associated with oil or gas production or processing operations or with injection or disposal operations and containing hydrocarbons or hydrocarbon waste or residue, salt water, strong caustics or strong acids, or other deleterious chemicals or harmful contaminants.

C. Notification of such fire, break, leak, spill, or blowout shall be in accordance with the provisions set forth below:

(1) Well Blowouts. Notification of well blowouts and/or fires shall be "immediate notification" described below. ("Well blowout" is defined as being loss of control over and subsequent eruption of any drilling or workover well, or the rupture of the casing, casinghead, or wellhead or any oil or gas well or injection or disposal well, whether active or inactive, accompanied by the sudden emission of fluids, gaseous or liquid, from the well.)

(2) "Major" Breaks, Spills, or Leaks. Notification of breaks, spills, or leaks of 25 or more barrels of crude oil or condensate, or 100 barrels or more of salt water, none of which reaches a watercourse or enters a stream or lake; breaks, spills, or leaks in which one or more barrels of crude oil or condensate or 25 barrels or more of salt water does reach a watercourse or enters a stream or lake; and breaks, spills, or leaks of hydrocarbons or hydrocarbon waste or residue, salt water, strong caustics or strong acids, gases, or other deleterious chemicals or harmful contaminants of any magnitude which may with reasonable probability endanger human health or result in substantial damage to property, shall be "immediate notification" described below.

(3) "Minor" Breaks, Spills, or Leaks. Notification of breaks, spills, or leaks of 5 barrels or more but less than 25 barrels of crude oil or condensate, or 25 barrels or more but less than 100 barrels of salt water, none of which reaches a watercourse or enters a stream or lake, shall be "subsequent notification" described below.

(4) "Gas Leaks and Gas Line Breaks. Notification of gas leaks from any source or of gas pipe line breaks in which natural or casinghead gas of any quantity has escaped or is escaping which may with reasonable probability endanger human health or result in substantial damage to property shall be "immediate notification" described below. Notification of gas pipe line breaks or leaks in which the loss is estimated to be 1000 or more MCF of natural or casinghead gas but in which there is no danger to human health nor of substantial damage to property shall be "subsequent notification" described below.

(5) Tank Fires. Notification of fires in tanks or other receptacles caused by lightning or any other cause, if the loss is, or it appears that the loss will be, 25 or more barrels of crude oil or condensate, or fires which may with reasonable probability endanger human health or result in substantial damage to property, shall be "immediate notification" as described below. If the loss is, or it appears that the loss will be at least 5 barrels but less than 25 barrels, notification shall be "subsequent notification" described below.

(6) Drilling Pits, Slush Pits, and Storage Pits and Ponds. Notification of breaks and spills from any drilling pit, slush pit, or storage pit or pond in which any hydrocarbon or hydrocarbon waste or residue, strong caustic or strong acid, or other deleterious chemical or harmful contaminant endangers human health or does substantial surface damage, or reaches a watercourse or enters a stream or lake in such quantity

(7) IMMEDIATE NOTIFICATION. "Immediate Notification" shall be as soon as possible after discovery and shall be either in person or by telephone to the district office of the Division district in which the incident occurs, or if the incident occurs after normal business hours, to the District Supervisor, the Oil and Gas Inspector, or the Deputy Oil and Gas Inspector. A complete written report ("Subsequent Notification") of the incident shall also be submitted in DUPLICATE to the appropriate district office of the Division within ten days after discovery of the incident.

(8) SUBSEQUENT NOTIFICATION. "Subsequent Notification" shall be a complete written report of the incident and shall be submitted in duplicate to the district office of the Division district in which the incident occurred within ten days after discovery of the incident.

(9) CONTENT OF NOTIFICATION. All reports of fires, breaks, leaks, spills, or blowouts, whether verbal or written, shall identify the location of the incident by quarter-quarter, section, township, and range, and by distance and direction from the nearest town or prominent landmark so that the exact site of the incident can be readily located on the ground. The report shall specify the nature and quantity of the loss and also the general conditions prevailing in the area, including precipitation, temperature, and soil conditions. The report shall also detail the measures that have been taken and are being taken to remedy the situation reported.

(10) WATERCOURSE, for the purpose of this rule, is defined as any lake-bed or gully, draw, stream bed, wash, arroyo, or natural or man-made channel through which water flows or has flowed.

APPENDIX B

1203 NOTIFICATION OF DISCHARGE--REMOVAL.

A. With respect to any discharge from any facility of oil or other water contaminant, in such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property, the following notifications and corrective actions are required:

1. As soon as possible after learning of such a discharge, but in no event more than twenty-four (24) hours thereafter, any person in charge of the facility shall orally notify the Chief, Ground Water Bureau, Environmental Improvement Division, or his counterpart in any constituent agency delegated responsibility for enforcement of these rules as to any facility subject to such delegation. To the best of that person's knowledge, the following items of information shall be provided:

a. the name, address, and telephone number of the person or persons in charge of the facility, as well as of the owner and/or operator of the facility;

b. the name and address of the facility;

c. the date, time, location, and duration of the discharge;

d. the source and cause of discharge;

e. a description of the discharge, including its chemical composition;

f. the estimated volume of the discharge; and

g. any actions taken to mitigate immediate damage from the discharge.

2. When in doubt as to which agency to notify, the person in charge of the facility shall notify the Chief, Ground Water Bureau, Environmental Improvement Division. If that division does not have authority pursuant to Commission delegation, the division shall notify the appropriate constituent agency.

3. Within one week after the discharger has learned of the discharge, the facility owner and/or operator shall send written notification to the same division official, verifying the prior oral notification as to each of the foregoing items and providing any appropriate additions or corrections to the information contained in the prior oral notification.

4. The oral and written notification and reporting requirements contained in the three preceding paragraphs and the paragraphs below are not intended to be duplicative of discharge notification and reporting requirements promulgated by the Oil Conservation Commission (OCC) or by the Oil Conservation Division (OCD); therefore, any facility which is subject to OCC or OCD discharge notification and reporting requirements need not additionally comply with the nofification/and reporting requirements herein.

5. As soon as possible after learning of such a discharge, the owner/operator of the facility shall take such corrective actions as are necessary or appropriate to contain and remove or mitigate the damage caused by the discharge.

6. If it is possible to do so without unduly delaying needed corrective actions, the facility owner/operator shall endeavor to contact and consult with the Chief, Ground Water Bureau, Environmental Improvement Division or appropriate counterpart in a delegated agent, in an effort to determine the division's views as to what further corrective actions may be necessary or appropriate to the discharge in question. In any event, no later than fifteen (15) days after the discharger learns of the discharge, the facility owner/operator shall send to said Bureau Chief a written report describing any corrective actions taken and/or to be taken relative to the discharge. Upon a written request and for good cause shown, the Bureau Chief may extend the time limit beyond fifteen (15) days.

7. The Bureau Chief shall approve or disapprove in writing the foregoing corrective action report within thirty (30) days of its receipt by the division. In the event that the report is not satisfactory to the division, the Bureau Chief shall specify in writing to the facility owner/operator any shortcomings in the report or in the corrective actions already taken or proposed to be taken relative to the discharge, and shall give the facility owner/operator a reasonable and clearly specified time within which to submit a modified corrective action report. The Bureau Chief shall approve or disapprove in writing the modified corrective action report within fifteen (15) days of its receipt by the division.

8. In the event that the modified corrective action report also is unsatisfactory to the division, the facility owner/operator has five (5) days from the notification by the Bureau Chief that it is unsatisfactory to appeal to the division director. The division director shall approve or disapprove the modified corrective action report within five (5) days of receipt of the appeal from the Bureau Chief's decision. In the absence of either corrective action consistent with the approved corrective action report or with the decision of the director concerning the shortcomings of the modified corrective action report, the division may take whatever enforcement or legal action it deems necessary or appropriate.

B. Exempt from the requirements of this section are continuous or periodic discharges which are made;

1. in conformance with water quality control commission regulations and rules, regulations or orders of other state or federal agencies; or

2. in violation of water quality control commission regulations but pursuant to an assurance of discontinuance or schedule of compliance approved by the commission or one of its duly authorized constituent agencies.

C. As used in this section:

1. "discharge" means spilling, leaking, pumping, pouring, emitting, emptying, or dumping into water or in a location and manner where there is a reasonable probability that the discharged substance will reach surface or subsurface water;

2. "facility" means any structure, installation, operation, storage tank, transmission line, motor vehicle, rolling stock, or activity of any kind, whether stationary or mobile;

3. "oil" means oil of any kind or in any form including petroleum, fuel oil, sludge, oil refuse and oil mixed with wastes;

4. "operator" means the person or persons responsible for the overall operations of a facility; and

5. "owner" means the person or persons who own a facility, or part of a facility.

D. Notification of discharge received pursuant to this regulation or information obtained by the exploitation of such notification shall not be used against any such person in any criminal case, except for perjury or for giving a false statement.

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of check No. _____ dated 5/6/10

or cash received on _____ in the amount of $ 100.00

from Coastal Chemical Co

for GW-222

Submitted by: Lawrence Romero Date: 5/12/10

Submitted to ASD by: Lawrence Romero Date: 5/12/10

Received in ASD by: _____ Date: _____

Filing Fee ✓ New Facility _____ Renewal _____

Modification _____ Other _____

Organization Code 521.07 Applicable FY 2010

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

Coastal Chemical Co., L.L.C.

May 6, 2010

Oil Conservation Division
New Mexico Environmental Division
Water Quality Management
1220 S. St. Francis Drive
Santa Fe, NM 87505
Attn: Mr. Glenn Von Gonten

RECEIVED OCD
2010 MAY 11 P 12: 38

Re: Discharge Plan Renewal
GW-222

Dear Mr. Von Gonten:

Please find attached the Discharge Plan Renewal Application and Discharge Plan for Coastal Chemical Co., on behalf of the Farmington, New Mexico facility. I have also enclosed a filing fee check in the amount of $100.00

Should you have any questions, please do not hesitate to call me at (337) 261-0796.

Sincerely,

Kathy McCann

Kathy McCann
Quality Coordinator

Enclosures

6133 Highway 90 East - Broussard, La. 70518
Phone: 337.261.0796 Fax: 337.261.0797

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Revised June 10, 2003

Submit Original
Plus 1 Copy
to Santa Fe
1 Copy to Appropriate
District Office

DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES,GAS PLANTS, REFINERIES, COMPRESSOR, GEOTHERMAL FACILITES AND CRUDE OIL PUMP STATIONS

(Refer to the OCD Guidelines for assistance in completing the application)

GW-222
Renewal

☐ New ☒ Renewal ☐ Modification

1. Type: Chemical and Lubricant Distribution
2. Operator: Coastal Chemical Co., L.L.C.
   Address: 1130 Madison Lane, Farmington, NM 87401
   Contact Person: Kenneth Shepherd Phone: 903-812-0665
3. Location: NE1 /4 NE1 /4 Section 24 Township 29N Range 12W
   Submit large scale topographic map showing exact location.

4. Attach the name, telephone number and address of the landowner of the facility site.
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.
6. Attach a description of all materials stored or used at the facility.
7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.
8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.
9. Attach a description of proposed modifications to existing collection/treatment/disposal systems. none
10. Attach a routine inspection and maintenance plan to ensure permit compliance.
11. Attach a contingency plan for reporting and clean-up of spills or releases.
12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.
13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.

14. CERTIFICATIONI hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Kathy McCann Title: Quality Coordinator

Signature: Kathy McCann Date: 5-7-10

E-mail Address: kmccann@brenntag.com

Coastal Chemical Co., L.L.C.

Coastal Chemical Co., L.L.C.

Farmington, New Mexico Facility

San Juan County

Discharge Plan Renewal

Discharge Plan GW – 222

Renewal Submitted May 6, 2010

6133 Highway 90 East - Broussard, La. 70518
Phone: 337.261.0796 Fax: 337.261.0797

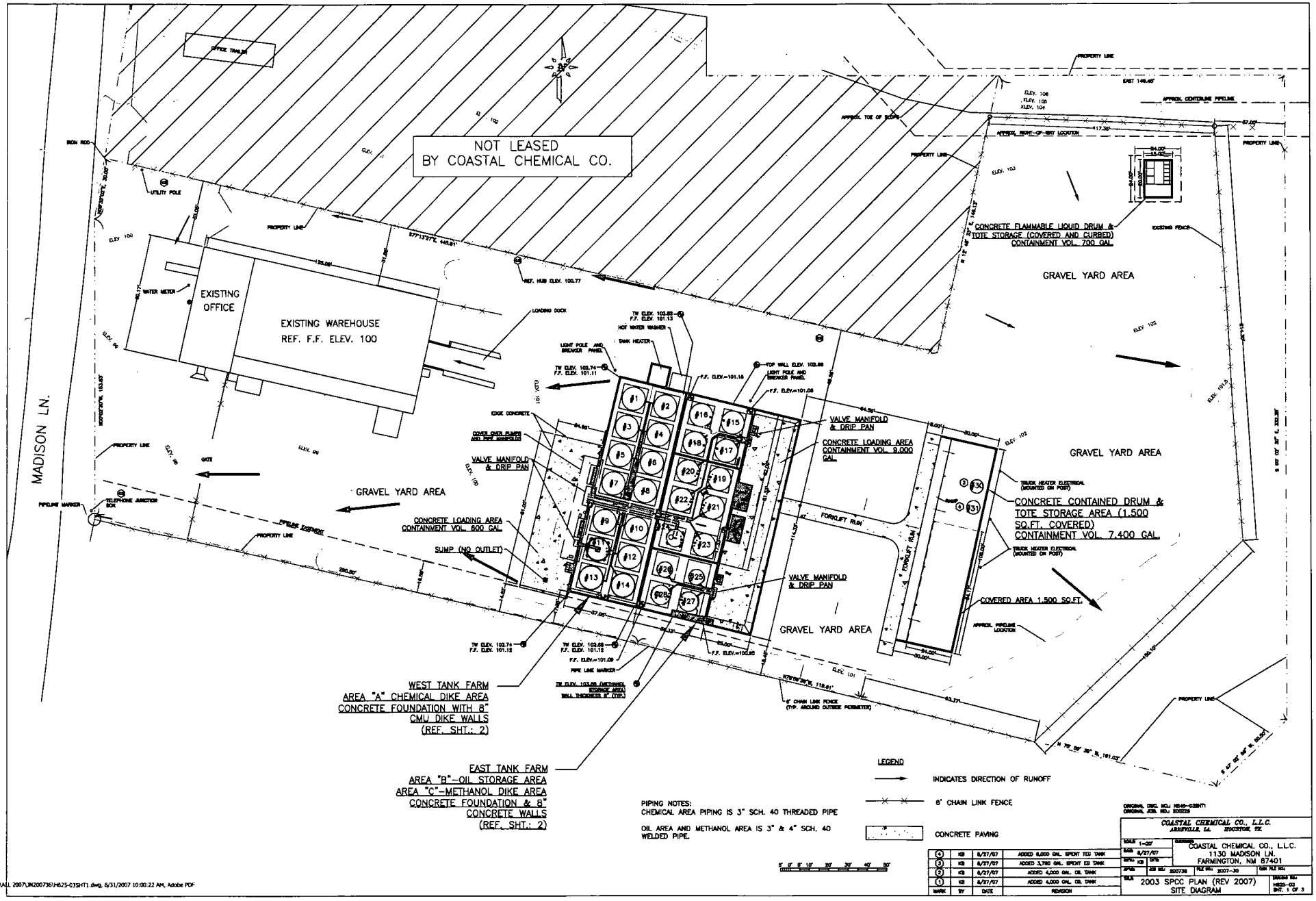
#4

Coastal Chemical Co., L.L.C.

Farmington Facility Owner Information

Averett, Dimmick & Hagen
Chuck Hagen, Agent
650 W. Main Street
Farmington, NM 87402
505-325-8863

6133 Highway 90 East - Broussard, La. 70518
Phone: 337.261.0796 Fax: 337.261.0797


NOT LEASED
BY COASTAL CHEMICAL CO.
MADISON LN.
EXISTING OFFICE
EXISTING WAREHOUSE
REF. F.F. ELEV. 100
GRAVEL YARD AREA
GRAVEL YARD AREA
GRAVEL YARD AREA
GRAVEL YARD AREA
CONCRETE FLAMMABLE LIQUID DRUM & TOTE STORAGE (COVERED AND CURBED) CONTAINMENT VOL. 700 GAL.
VALVE MANIFOLD & DRIP PAN
CONCRETE LOADING AREA CONTAINMENT VOL. 9,000 GAL.
VALVE MANIFOLD & DRIP PAN
CONCRETE CONTAINED DRUM & TOTE STORAGE AREA (1,500 SQ.FT. COVERED) CONTAINMENT VOL. 7,400 GAL.
COVERED AREA 1,500 SQ.FT.
CONCRETE LOADING AREA CONTAINMENT VOL. 600 GAL.
SUMP (NO OUTLET)
VALVE MANIFOLD & DRIP PAN
WEST TANK FARM
AREA "A" CHEMICAL DIKE AREA
CONCRETE FOUNDATION WITH 8" CMU DIKE WALLS
(REF. SHT.: 2)
EAST TANK FARM
AREA "B"-OIL STORAGE AREA
AREA "C"-METHANOL DIKE AREA
CONCRETE FOUNDATION & 8" CONCRETE WALLS
(REF. SHT.: 2)
LEGEND
INDICATES DIRECTION OF RUNOFF
6' CHAIN LINK FENCE
CONCRETE PAVING
PIPING NOTES:
CHEMICAL AREA PIPING IS 3" SCH. 40 THREADED PIPE
OIL AREA AND METHANOL AREA IS 3" & 4" SCH. 40 WELDED PIPE.
COASTAL CHEMICAL CO., L.L.C.
1130 MADISON LN.
FARMINGTON, NM 87401
2003 SPCC PLAN (REV 2007)
SITE DIAGRAM

#5

#6

Area A - Above Ground Bulk Storage (West Tank Farm)

Tank Designation	Product	Quantity (gal)	Containment	Major Failure Event	Maximum Discharge Rate (gpm)
Storage Tank 1	Triethylene Glycol	16,919	Diked	Tank Rupture	250
Storage Tank 2	Dea 85%	16,919	Diked	Tank Rupture	250
Storage Tank 3	Triethylene Glycol	16,919	Diked	Tank Rupture	250
Storage Tank 4	Triethylene Glycol	16,919	Diked	Tank Rupture	250
Storage Tank 5	Coastal Guard 100	16,919	Diked	Tank Rupture	250
Storage Tank 6	Gas Spec SS Solvent	16,919	Diked	Tank Rupture	250
Storage Tank 7	Coastal Guard 50%	12,690	Diked	Tank Rupture	250
Storage Tank 8	Fleet 15w40	12,690	Diked	Tank Rupture	250
Storage Tank 9	Ethylene Glycol 100	12,690	Diked	Tank Rupture	250
Storage Tank 10	Gas Spec CS+ Additive	8,225	Diked	Tank Rupture	250
Storage Tank 11	Gas Spec Blend Tank	12,690	Diked	Tank Rupture	250
Storage Tank 12	Wash Water	8,225	Diked	Tank Rupture	250
Storage Tank 13	Reprocessed Triethylene Glycol	12,690	Diked	Tank Rupture	250
Storage Tank 14	Gas Spec 2000 Additive	12,690	Diked	Tank Rupture	250
Loading/ Unloading Manifold		300	Diked	Line Rupture	20

This above ground storage area contains fourteen, diked tanks used to receive and store lube oils, solvents, various types of chemical additives and waters for bulk distribution, product packaging, and blending. Transfer to the tanks from trucks or tank cars is accomplished using the truck pump or facility transfer pump. Transfer from the tanks to the product packaging or blending area is accomplished by means of the facility transfer pumps. These tanks are located on a reinforced concrete base within a reinforced concrete dike. Each tank is equipped with locking gate valves, check valves, visible site glasses, gauge hatches, and venting apparatus. All lines are dedicated and equipped with quick

couplers and dust caps. The largest above ground tank in this area has a capacity of 16,919 gallons. The containment system of the area is capable of holding the volume of this tank as well as expected precipitation. Risk of spills during loading and unloading is limited to hose rupture and is minimized by continuous operator attention. Inventory is checked on a regular basis to verify the correct amounts in the above ground storage tanks for distribution. All water within the diked containment area is collected and transferred to a holding tank for testing and discharge approval.

Area B - Above Ground Bulk Storage (East Tank Farm)

Tank Designation	Product	Quantity (gal)	Contain-ment	Major Failure Event	Maximum Discharge Rate (gpm)
Storage Tank 15	Mobil Pegasus 805	12,690	Diked	Tank Rupture	250
Storage Tank 16	Mobil Pegasus Special CF	12,690	Diked	Tank Rupture	250
Storage Tank 17	Summit NGP-150	12,690	Diked	Tank Rupture	250
Storage Tank 18	Mobil Pegasus 805	12,690	Diked	Tank Rupture	250
Storage Tank 19	Mobil PEG Special	12,690	Diked	Tank Rupture	250
Storage Tank 20	Mobil Pegasus 505	16,919	Diked	Tank Rupture	250
Storage Tank 21	Mobil PEG 1005	16,919	Diked	Tank Rupture	250
Storage Tank 22	Mobil Pegasus 505	16,919	Diked	Tank Rupture	250
Storage Tank 23	Mobil Pegasus 710	16,919	Diked	Tank Rupture	250
Storage Tank 24	Coastal Guard 50%	7,614	Diked	Tank Rupture	250
Loading/ Unloading Manifold		300	Diked	Line Rupture	20

This above ground storage area contains ten, diked tanks used to receive and store lube oils, solvents, various types of chemical additives and waters for bulk distribution, product packaging, and blending. Transfer to the tanks from trucks or tank cars is accomplished using the truck pump or facility transfer pump. Transfer from the tanks to the product packaging or blending area is accomplished by means of the facility transfer pumps. These tanks are located on a reinforced concrete base within a reinforced concrete dike. Each tank is equipped with locking gate valves, check valves, visible site glasses, gauge

hatches, and venting apparatus. All lines are dedicated and equipped with quick couplers and dust caps. The largest above ground tank in this area has a capacity of 16,919 gallons. The containment system of the area is capable of holding the volume of this tank as well as expected precipitation. Risk of spills during loading and unloading is limited to hose rupture and is minimized by continuous operator attention. Inventory is checked on a regular basis to verify the correct amounts in the above ground storage tanks for distribution. All water within the diked containment area is collected and transferred to a holding tank for testing and discharge approval.

Area C - Above Ground Bulk Storage (East Tank Farm)

Tank Designation	Product	Quantity (gal)	Contain-ment	Major Failure Event	Maximum Discharge Rate (gpm)
Storage Tank 25	Methanol	8,272	Diked	Tank Rupture	250
Storage Tank 26	Methanol	8,272	Diked	Tank Rupture	250
Storage Tank 27	Methanol	11,750	Diked	Tank Rupture	250
Storage Tank 28	Methanol	11,750	Diked	Tank Rupture	250
Loading/ Unloading Manifold		300	Diked	Line Rupture	20

Area D – Above Ground Bulk Storage

Tank Designation	Product	Quantity (gal)	Contain-ment	Major Failure Event	Maximum Discharge Rate (gpm)
Storage Tank 29	BUSGARD 15 W 40	4,000	**Recessed Concrete Slab**	Tank Rupture	250
Storage Tank 30	BUSGARD 15 W 40	4,000	**Recessed Concrete Slab**	Tank Rupture	250

Area E – Above Ground Bulk Storage

Tank Designation	Product	Quantity (gal)	Containment	Major Failure Event	Maximum Discharge Rate (gpm)
Storage Tank 31	Spent EG	3,760	Recessed Concrete Slab	Tank Rupture	250
Storage Tank 32	Spent TEG	8,000	Recessed Concrete Slab	Tank Rupture	250

This above ground storage area contains ten, diked tanks used to receive and store lube oils, solvents, various types of chemical additives and waters for bulk distribution, product packaging, and blending. Transfer to the tanks from trucks or tank cars is accomplished using the truck pump or facility transfer pump. Transfer from the tanks to the product packaging or blending area is accomplished by means of the facility transfer pumps. These tanks are located on a reinforced concrete base within a reinforced concrete dike. Each tank is equipped with locking gate valves, check valves, visible site glasses, gauge hatches, and venting apparatus. All lines are dedicated and equipped with quick couplers and dust caps. The largest above ground tank in this area has a capacity of 11,750 gallons. The containment system of the area is capable of holding the volume of this tank as well as expected precipitation. Risk of spills during loading and unloading is limited to hose rupture and is minimized by continuous operator attention. Inventory is checked on a regular basis to verify the correct amounts in the above ground storage tanks for distribution. All water within the diked containment area is collected and transferred to a holding tank for testing and discharge approval.

In the event that spilled oils are recovered in an unusable state, these oils are stored in containers of appropriate size and construction pending disposal, reclamation, or recycling. Storage of these containers is within confined and contained areas in accordance with the objectives of this Plan. Disposal, reclamation or recycling of these oils is performed by licensed facilities in accordance with appropriate Federal and State regulations.

Coastal Chemical Co., L.L.C. maintains a response list delineating the contacts and telephone numbers for the facility response coordinator, National Response Center, cleanup contractors, and all appropriate Federal, State, and local agencies who must be contacted in the event of a discharge. This list is found in Attachment 3.

Tanks are designed in accordance with standards, which comply with and meet or exceed the following standards as applicable: American Standard Bulletin

#7

Coastal Chemical Co., L.L.C.

Farmington Facility Information

Rinse Water from pump, hoses and tanks used to deliver virgin chemical. All chemicals rinsed out are virgin, unused chemicals. Chemicals may include: Alkanolamine, Glycol (TEG and EG) antifreeze.

Average Amount – 3000 gallons per year or 8.3 gallons per day.

6133 Hwy. 90 East – Broussard, LA 70518 - Phone: 337.261.0796 Fax: 337.261.0797

#8

Waste Management	Section VI.A.	Procedure 1
p. 1 of 1	Effective: 2-12-03 Supersedes: 12-1-94 Review: 12-23-02	Empty Drum Management

Empty Drum Management

Policy: Coastal Chemical Co., L.L.C. is committed to the policy that all self-generated waste and empty containers are disposed of in a responsible manner, in compliance with all local, state and federal regulations.

Responsible Distribution Code: VI. A.
ISO 9000 Standard:
7.5.3 Identification and Traceability
8.3 Control of Nonconforming Product

Empty drums that previously contained a lading and have not been reconditioned are considered a non-conforming product. The following procedures are used to prevent the improper disposal or inadvertent reuse of these containers.

1. Empty drums (steel or poly) are only scheduled for pick up from customers when the following administrative conditions are met:
   - customer requests it;
   - drum had been supplied by Coastal; and
   - Coastal drum supplier or a drum reconditioner will take back empty drum.

2. Empty drums are only picked up from customers when all of the following physical conditions are met. Through inspection, the Coastal driver makes the determination of condition and has authority to reject individual containers from pick-up.
   - drum is empty; no more than 1" of residue remains in the container;
   - all bungs, gaskets are in place (can be replaced by driver) and tight;
   - drum has a label showing "last contained" product; and
   - drum appears to have structural integrity (i.e. not rusted out, no punctures, etc.).

3. The Facility Manager has responsibility for empty drum management:
   - if drums are returnable to supplier, supplier is notified of quantity and approval to hold drums for next supplier delivery, or ship via common carrier are made; and
   - empty drums which previously contained a hazardous material can only be shipped on common or contract carrier when a bill of lading is prepared in accordance with 49 CFR. This bill of lading (delivery ticket) is a Quality Record.

Reviewed By:		Date:	
Approved By:		Date:	

Waste Management	Section VI.A.	Procedure 2
p. 1 of 1	Effective: 2-12-03 Supersedes: 12-1-94 Review: 12-23-02	Other Self-Generated Waste Management

Other Self-Generated Waste Management

Policy: Coastal Chemical Co., L.L.C. is committed to the policy that all self-generated waste and empty containers are disposed of in a responsible manner, in compliance with all local, state and federal regulations.

Responsible Distribution Code: VI. A.
ISO 9000 Standard:
7.5.3 Identification and Traceability
8.3 Control of Nonconforming Product

1. See procedures in Section VI.B.

Reviewed By:		Date:	
Approved By:		Date:	

Waste Management	Section VI.B.	Procedure 1
p. 1 of 1	Effective: 2-12-03 Supersedes: 12-1-94 Review: 12-23-02	Waste Reduction: Bulk Transfers

Waste Reduction: Bulk Transfers

Policy: Coastal Chemical Co., L.L.C. encourages waste reduction programs or procedures, by first trying source reduction, second to recycle/reuse, third to treatment and fourth to disposal.

Responsible Distribution Code: VI. B.
ISO 9000 Standard:
7.5.3 Identification and Traceability
8.3 Control of Nonconforming Product

Spills, leaks and ruptures produce materials that if improperly managed result in waste, a non-conforming product. The following procedures are used to reduce the production of waste in bulk transfer operations.

1. Check eyewash station for proper operation before starting.

2. Gaskets, hoses and pumps are maintained to reduce the production of leaks, drips and ruptures.

3. Pails are used at all truck connections, so that any drips recovered can be emptied into the appropriate truck compartment or bulk tank. Pails will be covered when not in use.

4. Following a bulk product transfer, hoses are walked to the tank or container in order to drain as much product as feasible and reduce putting residue into a drip pan or trough.

5. Cap or plug transfer hoses and return to proper storage.

6. Facility Managers will consider installation of a nitrogen flushing system to reduce line residues.

7. Employees are continually observing for leaks, ruptures, spills and have authority to shut down a transfer operation when operating problems are observed.

8. In tanker shipments and when logistically feasible, compatible products are shipped before incompatibles (see Section IV.A. 1, Compatibility Categories) to reduce the number of wash-outs needed.

Reviewed By:		Date:	
Approved By:		Date:	

Waste Management	Section VI.B.	Procedure 2
p. 1 of 1	Effective: 2-12-03 Supersedes: 12-1-94 Review: 12-23-02	Waste Reduction: Damaged Freight

Waste Reduction: Damaged Freight

Policy: Coastal Chemical Co., L.L.C. encourages waste reduction programs or procedures, by first trying source reduction, second to recycle/reuse, third to treatment and fourth to disposal.

Responsible Distribution Code: VI. B.
ISO 9000 Standard:
7.5.3 Identification and Traceability
8.3 Control of Nonconforming Product

Damaged freight produces non-conforming product. The following procedures are used to manage damaged freight at warehouse receiving locations and ensure they do not become a waste for Coastal.

1. The Facility Manager, in cooperation with freight carriers Insurance Department, has responsibility for managing damaged freight.

2. If a carrier arrives at a warehouse receiving location with damaged freight, determine whether the shipment is a hazardous material or a non-hazardous material.

3. Damaged Hazardous Materials Freight:
   - refuse to accept damaged product in shipment
   - do not make the carrier leave the receiving area with a damaged package
   - provide emergency response as required
   - weigh package to find out amount of product lost
   - note amount and type of damage on carrier's and shipper's bills of lading
   - contact carrier and file a freight claim, ensuring the carrier assumes responsibility for disposition of the damaged product, including costs for managing as hazardous waste. This freight claim is a Quality Record.
   - permit the carrier to temporarily "store" the materials per 49 CFR 177.853 (b) until arrangements are made for proper overpack and return to the shipper or repackaging for resale.
   - if the carrier has not removed the material within 30 days of the incident, follow-up with the carrier every 30 days until it is removed.

4. Damaged Non- Hazardous Materials Freight:
   - decide whether to refuse or accept shipment
   - carrier can be asked to leave the receiving area with a damaged package
   - provide emergency response as required
   - if damaged material is accepted, repair or repackage the material
   - weigh package to find out amount of product lost.
   - note amount and type of damage on carrier's and shipper's bill of lading.
   - contact carrier and file a freight claim for costs associated with repair/repackaging. This freight claim is a Quality Record.

Reviewed By:		Date:	
Approved By:		Date:	

Waste Management	Section VI.B.	Procedure 3
p. 1 of 1	Effective: 2-12-03 Supersedes: 12-1-94 Review: 12-23-02	Waste Recycling/Reuse

Waste Recycling/Reuse

Policy: Coastal Chemical Co., L.L.C. encourages waste reduction programs or procedures, by first trying source reduction, second to recycling/reuse, third to treatment and fourth to disposal.

Responsible Distribution Code: VI. B.
ISO 9000 Standard:
7.5.3 Identification and Traceability
8.3 Control of Nonconforming Product

Waste is considered a non-conforming product. The following procedures are used to minimize waste production through implementation of a recycling alternative.

1. By utilizing the ARU/GDU or other recycling facilities.

2. In some facilities, residue anti-freeze can be used in the bulk tank farm heating system.

3. Retained samples are managed in accordance with Sections IV.F.1 and VI.5.

4. Damaged dry products are repackaged for sale and use per the decision of the Facility Manager.

Reviewed By:		Date:	
Approved By:		Date:	

Waste Management	Section VI.B.	Procedure 4
p. 1 of 2	Effective: 2-12-03 Supersedes: 12-1-94 Review: 12-23-02	Waste Disposal

Waste Disposal

Policy: Coastal Chemical Co., L.L.C. encourages waste reduction programs or procedures, by first trying source reduction, second to recycle/reuse, third to treatment and fourth to disposal.

Responsible Distribution Code: VI. B.
ISO 9000 Standard:
7.5.3 Identification and Traceability
8.3 Control of Nonconforming Product

Waste is considered a non-conforming product. In certain cases waste minimization, recycling/reuse, and treatment are not sufficient to eliminate waste and waste is created for disposal. The Facility Manager, in cooperation with the HS&E Manager, has responsibility for disposing of waste.

Chemical Waste Disposal

1. Chemical products are analyzed in accordance with 40 CFR§ 261 Subparts B, C and D and appropriate State equivalent systems to determine whether they are hazardous waste or can be managed as non-hazardous chemical waste. Waste profiles prepared to support this analysis are a Quality Record.

2. If a chemical product has been determined to be a hazardous waste it is:
   - managed in accordance with 40 CFR§ 262 and appropriate State equivalent systems
   - not retained on-site for more than 90 days after the determination of its hazardous characteristics
   - disposed of at facilities permitted for the waste stream in accordance with 40 CFR§ 266 and appropriate State equivalent systems. The HS&E Manager is consulted in selecting a disposal facility.
   - Uniform Hazardous Waste Manifests and Restricted Waste Notification Statements are Quality Records for these waste streams.
   - annual reports for these waste streams are filed by the HS&E Manager. The exception is Abbeville where the report is filed by the Facility Manager and Facility Materials Manager. These annual reports are Quality Records.

3. If a chemical product has been determined to be a non-hazardous waste it is:
   - labeled and packaged as a non-hazardous waste
   - disposed of at facilities permitted for the waste stream. The HS&E Manager is consulted in selecting a disposal facility.
   - if shipped under a Uniform Hazardous Waste Manifest, the manifest is a Quality Record for the waste streams. In some cases the Quality Record is the shipping paper or other bill of lading (delivery ticket).

Non-Chemical Waste Disposal

1. Other non-chemical waste disposal is handled by contract with a local garbage disposal service. Invoices are the Quality Record.

Reviewed By:		Date:	
Approved By:		Date:	

Waste Management	Section VI.B.	Procedure 5
p.1 of 1	Effective: 2-12-03 Supersedes: 12-1-94 Review: 12-23-02	Sample Disposal

Sample Disposal

Policy: Coastal Chemical Co., L.L.C. will document current operating procedures for each facility.

Responsible Distribution Code: VI.B.
ISO 9000 Standard:
7.5.3 Identification and Traceability
8.3 Control of Nonconforming Product

1. Check eyewash station for proper operation before starting.

2. Samples of virgin product, including sales samples, are returned to their respective bulk tanks, following the same personal protective equipment requirements for bulk receiving.

3. The used sample containers are washed with the appropriate cleaning solution, stored in open top drums and sent to a solid waste landfill. The used cleaning solution is added to the waste tank.

4. Return samples of TEG (Triethylene Glycol) from the Services Group to their waste reprocessed tanks. Services Group sample containers are managed per step 2.

5. Waste glycols are put in their waste tank for proper disposal.

Reviewed by:		Date:	
Approved By:		Date:	

COASTAL CHEMICAL QUALITY SYSTEM PROCEDURE MANUAL
General Operations
Monthly Safety Environmental & Quality Inspection

Document No: GOF100-04
Date of Origin: Jan. 1, 2003

Current Date of Issue: **Dec. 21, 2009**

Facility Location: _____ **Inspection Date:** _____

INSTRUCTIONS: Check or complete as appropriate. Checking NI requires completion of Action Date, Responsible Party at time of inspection. Complete Date Resolved after the action item has been corrected.

NA=not applicable, or none observed during inspection **OK**=Acceptable **NI**=Needs Improvement

Safety/Environmental & Quality Item	NA	OK	NI	Action Date	Responsible Party	Date Resolved	Location of Item	Other Comments
**OFFICE \ WAREHOUSE \ YARD \ TANK FARM **								
LOADING AREA \ TRANSPORTATION								
1. General Housekeeping: work areas uncluttered and clear for emergency egress								
2. Slip, trip, fall hazards eliminated								
3. Rubbish containers emptied								
4. Night/security lighting & timers functional								
5. Employees using proper lifting techniques								
6. Electrical Outlet Integrity/ Unblocked								
7. Extension cords/ portable power tools in good condition								
8. Perimeter locks on building entrances in place/work								
9. Visitor control in place/used								
10. Intrusion alarms tested, if applicable								
11. Smoke detector tested								
12. Retain samples managed								
13. Running, horseplay, unsafe work habits avoided								
14. Exit doors marked with exit sign, kept unlocked during business hours								
15. Non-exit doors marked								

NA=not applicable, or none observed during inspection **OK**=Acceptable **NI**=Needs Improvement								
Safety/Environmental & Quality Item	**NA**	**OK**	**NI**	**Action Date**	**Responsible Party**	**Date Resolved**	**Location of Item**	**Other Comments**
16. Emergency Phone Numbers prominently posted								
17. Diagram of fire extinguishers/emergency equipment prominently posted								
18. Fire Extinguishers (10/20# A/B/C): accessible (75' in office), tagged & inspected								
19. No Smoking signs posted								
20. Mezzanine/ balcony used for storage marked for load capacity with rails & toe boards								
21. Damaged bags/drums recovered/ repackaged ASAP								
22. Meters or Scales certified per State Regs. **Date of last certification:**_____								
23. Hazardous Chemical List available (full facility)								
24. Guard on compressor. Warning signs in place for automatic starting.								
25. Fork Lifts : working horn, fire extinguisher, overhead guard, good tires, rubber pads on pedals, no fluid leaks, hour meter, hand brake & backup alarm.								
26. Emergency Spill Response Equipment in stock and readily accessible, and PPE needed is accessible								
27. Edge of dock clearly marked								
28. Pallet racks marked for capacity and properly utilized								
29. Safety Committee meets monthly (full facility)								
30. OSHA 300 form kept current within 6 days (full facility)								
31. No unmarked containers of material which require analysis or identification for disposal								

NA=not applicable, or none observed during inspection **OK**=Acceptable **NI**=Needs Improvement

Safety/Environmental & Quality Item	NA	OK	NI	Action Date	Responsible Party	Date Resolved	Location of Item	Other Comments
32. Flammable liquids in drums stored outside in maximum								
33. Product segregated in storage by compatibility								
34. No evidence of spillage on yard & paving leading to possible regulatory censure								
35. Pallets stacked safely; broken pallet accumulation limited; none against fence								
36. Trash receptacles away from buildings & dock								
37. Cylinders secured								
38. Safety Shower/eyewash unobstructed & functional								
39. Perimeter fence line walked; & all sections functional								
40. Locks on valves in place/working								
41. Tank valves kept closed, except as needed								
42. Tank ladders & catwalks in good condition								
43. Metal tanks maintained & grounded								
44. Dikes in good condition without ***cracks, holes, or leaks***								
45. Product transfer lines identified, inspected, ***and in good condition***								
46. No evidence of ***leaks /spills /seepage from piping, valves, or fittings***								
47. Are dikes free of liquids?								
48. Area tank supports in good condition - no sign of corrosion, damage, or leaking?								
49. Is water standing around tank or supports?								
50. Are pipe supports in good condition - no signs of corrosion or deterioration?								

NA=not applicable, or none observed during inspection **OK**=Acceptable **NI**=Needs Improvement								
Safety/Environmental & Quality Item	**NA**	**OK**	**NI**	**Action Date**	**Responsible Party**	**Date Resolved**	**Location of Item**	**Other Comments**
51. No valve drippage								
52. Storage tank contents identified, using NFPA signals & product name								
53. Storage valves identified by name of product								
54. Tank gauges operable; gauge glasses clear, tapes, floats functioning								
55. Pump maintenance: no seal leakage, necessary drip from packed shafts contained; shaft guards in place								
56. No excessive noise from pumps or other power equipment								
57. Engineering controls for vapor/dust collection available, used, in good condition								
58. Grounding system and Interlock system is used for all liquid packaging/ bulk transfers and is tested to operate properly.								
59. Lot Control implemented as past of packaging process								
60. IBCs in test per DOT date or segregated for testing (30 month re-testing required)								
61. IBCs labeled/marked per DOT/OSHA regulations								
62. Wheels Chocks: Access / Use								
63. Preventive Maintenance Scheduled								
64. Drivers complete daily written inspections/ logs								
RAIL SIDING								
65. Rail siding clean of spilled product/trash; tracks/ties appear safe								
66. Derail devices in place where required; rail tank car flagged when connected; wheels chocked during bulk unloading								

NA=not applicable, or none observed during inspection **OK**=Acceptable **NI**=Needs Improvement

Safety/Environmental & Quality Item	NA	OK	NI	Action Date	Responsible Party	Date Resolved	Location of Item	Other Comments
67. Safety shower/eyewash function; fire extinguisher accessible; static lines in place/functional								
68. Check railcars in facility yard (if applicable), or at remote rail spur by driver, for any tampering or vandalism, prior to unloading.								
STORM WATER INSPECTION CHECKLIST								
69. Good Housekeeping performed								
70. Spill Prevention & Response Plan in place								
71. Erosion Control								
72. Property Berm								
73. Training/Education Program taking place at facility.								
74. Materials Handling Areas								
75. Materials Storage Areas								
76. Property Fence and secured								
77. Processing Area								
78. Transfer Areas								
79. Office Building								
WASTE								
80. No unmarked containers of material which require analysis or identification for disposal								
81. Waste records maintained at facility								
82. Have scheduled pick up of waste to ensure not stored over 90 days in yard?								

				Quanity	Profile	Waste Type		Estimated Cost
82. List of Waste at facility by Quanity, Profile, Type and Estimated Cost								
Note: Give the amount of waste on the yard and the estimated cost to dispose of the waste on yard. (Do not include any waste that a PO has been issued for)								

Comments: _____

INSPECTOR(S) PRINTED NAME(S) : _____

_____

INSPECTOR(S) SIGNATURE(S): _____

_____

#11

EMERGENCY CONTACTS
FOR
SPILLS OR ACCIDENTS IN LOUISIANA

Agency Notification Requirements:

- The office of the State Police is the lead agency for emergency response in Louisiana. They must be notified within 1-hour of determination of an unauthorized discharge, which causes emergency conditions. An emergency condition is one that could reasonably be expected to endanger the health and safety of the public, cause significant adverse damage to the land, water or air, or cause sever damage to property.
- An unauthorized discharge of a reportable quantity which does not cause an emergency condition must be reported within 24 hours, Report to:

CONTACT HS&E DIVISION SUPERVISOR – DENNIS LEAHEY at 903-235-4548 or CHARLES TOUPS at 337-298-1928

LOUISIANA DEPARTMENT OF PUBLIC SAFETY, Baton Rouge Office of State Police
(24 hour) (225) 925-6595

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY WATER POLLUTION CONTROL DIVISION
(24 hour) (225) 342-1234 – DEQ HOTLINE

LOUISIANA OIL SPILL COORDINATOR'S OFFICE
(225) 922-3230

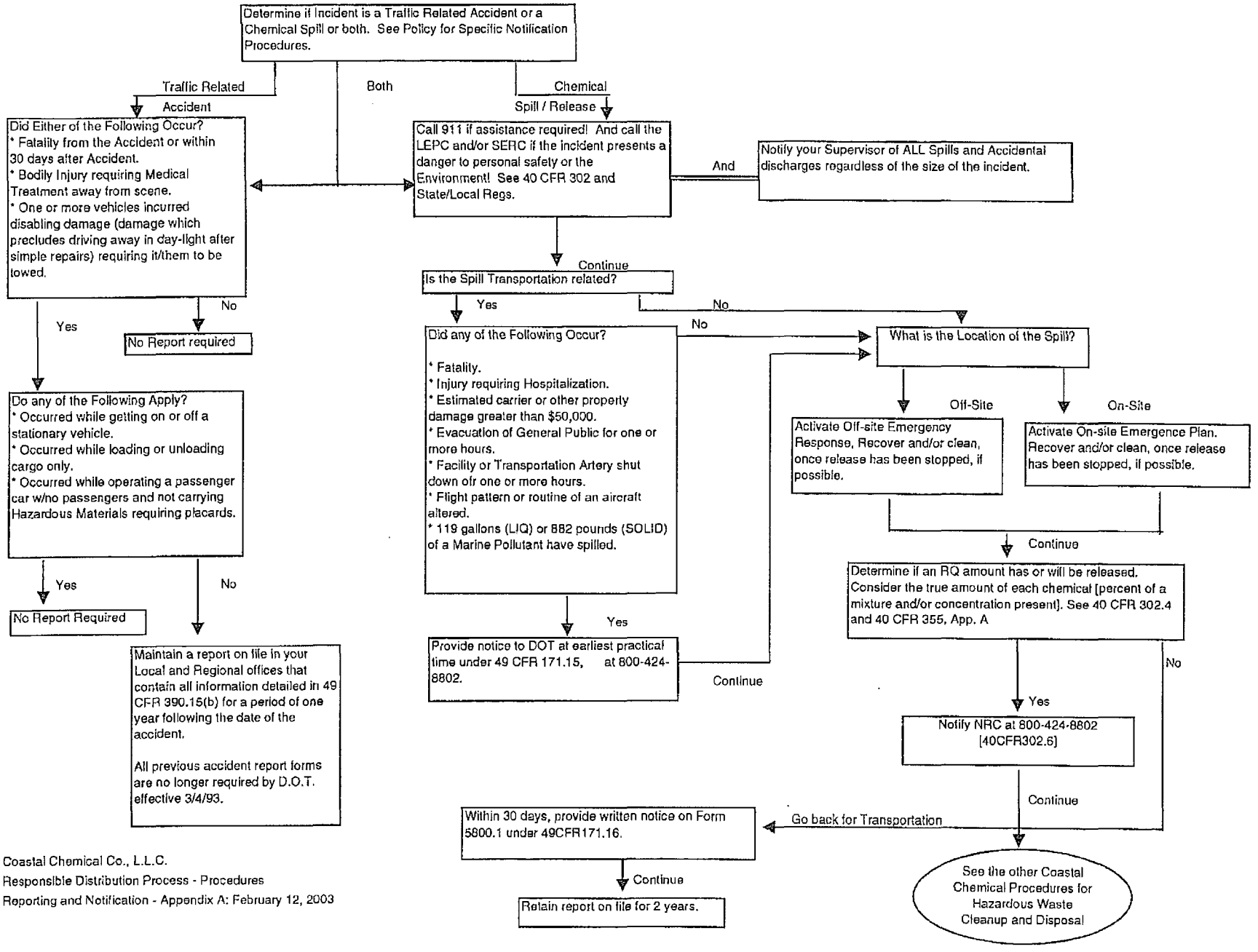
IF DISCHARGED INTO THE MISSISSIPPI RIVER OR BAYOU LAFOURCHE, NOTIFY:

Lower Mississippi River Waterworks Warning Network
(8-4:30) (225) 342-1616 (above Sunshine Bridge)
(8-4:30) (225) 568-5100 (below Sunshine Bridge)

Any spill which contacts state waters must also be reported to:
National Response Center: (800) 424-8802 (This call is usually made by the HS&E Department)

- Attempt to recover and recycle oil if possible.
- Clean up contaminated soil and vegetation as per state agency requirements.
- Oil contaminated soil may require sampling and analysis before proper disposal can take place.

NOTIFICATION TO OUTSIDE AGENCIES IN THE EVENT OF A VEHICLE ACCIDENT OR CHEMICAL SPILL/RELEASE



Site Navigation

- Rules, Policy & Legislation
- Permits, Licenses & Registrations
- Compliance, Enforcement & Cleanups
- Drinking Water & Water Availability
- Reporting
- Environmental Quality
- Assistance, Education & Participation
- Pollution Prevention & Recycling
- Contracts, Funding & Fees
- TCEQ Home

- About TCEQ
- Contact Us

Have you had contact with the TCEQ lately? Complete our Customer Satisfaction Survey.

BACK TO: Reporting Environmental Problems to the TCEQ

TCEQ Toll-free Numbers

Below is a list of 1-800, 1-888, and 1-877 numbers maintained for specific uses. **Please note that calls cannot be transferred to other areas of the agency from these connections.**

The TCEQ does not have a general toll-free number. The main switchboard can be contacted by dialing 512/239-1000.

- **Information Lines**
- **Reporting Lines**

Information Lines:

- **Local Government Assistance:**
  1-800-447-2827
  Hot line for local governments to obtain information, advice and assistance from the TCEQ. Answered from 9 a.m. to noon and from 1 p.m. to 4 p.m. on business days.

- **Ozone Status Line:**
  1-888-994-9901
  Provides the latest status of ozone warnings for Houston and Dallas-Fort Worth. Updated hourly, 7 days a week. Indicates if a warning is issued and the level of the warning. (See our PDF about ozone.)

- **Public Assistance on Permitting:**
  1-800-687-4040
  One-stop calling for the general public to inquire about permitting activity within the TCEQ.

- **Small Business Assistance:**
  1-800-447-2827
  Hot line for small businesses to request environmental information and how to comply with environmental regulations. red from 9 a.m. to noon and from 1 p.m. to 4 p.m. on business days.

›› Questions or C
ac@tceq.state

1-800-CLEAN-L and Wel

The TCEQ part with the privat the EPA, and o states to provi citizens an environmental information sy that can be cu for each comm

RELATED LIN

TCEQ Phone Directory

- **Superfund Community Relations Line:**
  1-800-633-9363
  Local citizens may call with questions and concerns regarding state and federal superfund sites in their area.

- **Toxicology Information Line**
  1-877-922-8370
  Get information about toxicology-related issues, including Texas Water Code 26.408 notices.

- **Vehicle Emissions Testing Hot Line:**
  1-888-295-0141
  For information about vehicle emissions testing and the vehicle emissions registration denial program.

Reporting Lines:

- **Environmental Complaints Hot Line:**
  1-888-777-3186
  Texas residents can use this line to report environmental complaints. They will be routed automatically to the closest TCEQ regional office. Callers after business hours may leave a recorded message.

- **Fraud Reporting Hot Line**
  1-877-901-0700
  For use by the public to report allegations of fraud, waste or abuse related to TCEQ operations.

- **Laboratory Reporting Fax Line:**
  1-800-252-0237
  Used by laboratories to report positive fecal coliform content in water samples.

- **Smoking Vehicle Reporting Line:**
  1-800-453-7664
  For use by the public to report smoking vehicles.

- **Spill Reporting (24-Hour):**
  1-800-832-8224
  Used to report spills, unpermitted discharges or releases to the environment, and SARA/EPCRA report notices. Supported by several Texas agencies, this line is answered 24 hours a day and serves as the TCEQ spill reporting line during the day and the State Emergency Response Commission (SERC) line at night.

- **Stephenville Special Project Office:**
  1-800-687-7078
  Specifically for the Stephenville, Texas area. Used to receive complaints concerning for example, dairy runoff

and overflowing ponds. Mandated by the legislature.

- **Watermaster Water Usage Reporting Lines:** Used by water rights holders to report in advance water pumping/usage in areas served by a watermaster.
  Rio Grande Watermaster: 1-800-609-1219
  South Texas Watermaster: 1-800-733-2733

Last Modified 11/3/05

U.S. Environmental Protection Agency

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EPA En Español
For Kids

To report oil and chemical spills, call the National Response Center: 1-800-424-8802.

Environmental Emergencies: Learn more about planning for and responding to emergencies.

Comments or Questions - Search frequently asked questions or submit your own question or comment.

EPA Hotlines: Phone numbers and Web sites for assistance with your questions.

Cus Satis

Tell us if site me ne

EPA Headquarters

Standard Mailing Address
Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
(202) 272-0167

Mailing Addresses for other EPA locations and regional offices.

Employee Directory - Identify EPA employees by name and location.

Comment on EPA regulations: EPA Dockets - EPA Dockets (EDOCKET) is an electronic public docket and on-line comment system designed to expand access to documents in EPA's major dockets.

The Common Questions list presents general information about EPA.

Report Data Errors - Notify EPA of **data errors** found in the EPA Web site's databases. In your notification, please include the URL where you found the error and be as specific as possible regarding the data in error. Your notification will be sent to the Data Steward who can assist in getting the information corrected.

Technical Problems:

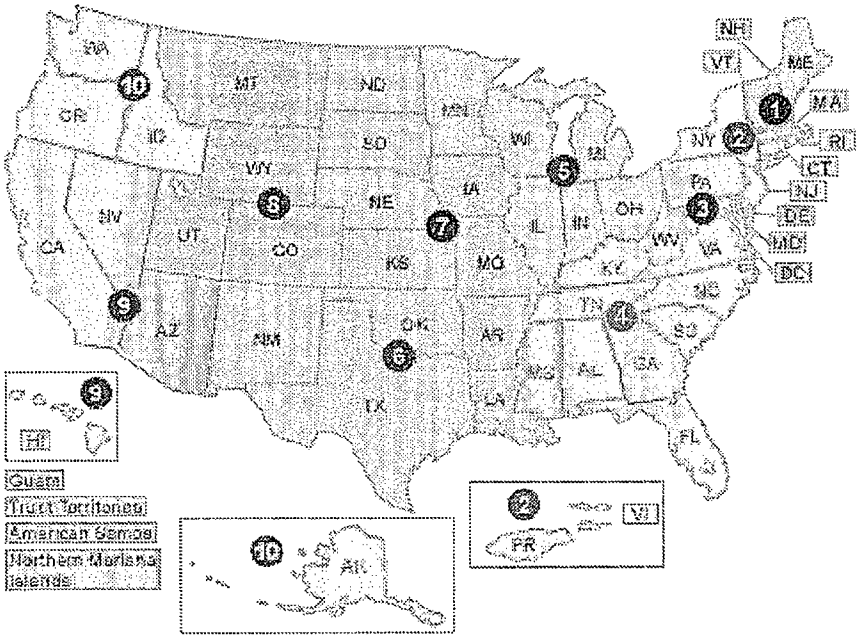
If you want to report a **broken link**, please let us know.

EPA's Internet Technical Support can assist you if you are experiencing technical problems with EPA's Web site, FTP, downloading files, etc.

Contact EPA Regional Offices: select a region below to contact that office.

EPA has ten regional offices, each of which is responsible for several states and territories. To get information about your region, select your state or territory from this list or from the map below. Alabama

GO



Last updated on Monday, June 27th, 2005
URL: http://www.epa.gov/epahome/comments.htm

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Environmental Emergencies | en español

Emergency information about Hurricane Katrina.

Whom to notify and how to be prepared in case of an environmental emergency.

An environmental emergency is a sudden threat to the public health, or the well-being of the environment, arising from the release or potential release of oil, radioactive materials, or hazardous chemicals into the air, land, or water. These emergencies may occur from transportation accidents, events at chemical or other facilities using or manufacturing chemicals, or as a result of natural or man-made disaster events. While there are many other serious environmental problems with which EPA is concerned, these activities are focused generally on sudden, immediate threats.

To Report Oil and Chemical Spills, call the National Response Center: 1-800-424-8802

Different Kinds of Environmental Emergencies

- Oil spills | Chemical spills and accidents | other emergency response: The Office of Emergency Management helps prevent, prepare for, and respond to health and environmental emergencies.
- **Pesticide exposure** - If someone has swallowed or inhaled a pesticide or gotten it in the eye or on the skin **call 911 if the person is unconscious, has trouble breathing, or has convulsions.** Check the label for directions on how to give first aid and call the Poison Control Center at 1-800-222-1222 for help with first aid information. More poison prevention tips. EXIT disclaimer

Who plans for and responds to these emergencies?

There is a complex system of responsibilities for these types of emergencies because there are many parts to them. In general, responsibilities are spread across the federal, state and local sectors, depending upon the size and type of the emergency and involve the environmental, emergency management, public safety, and public health agencies of the three levels of government. In addition, industry has a very important role to play in preparing for and responding to such emergencies.

Some Important Key Groups

- **The National Response Team** EXIT disclaimer is made up of fifteen federal agencies with responsibilities for preparing for, or responding to, major oil or

hazardous chemical emergencies. EPA is the chair with the U.S Coast Guard as vice-chair, and corresponding regional teams are in each of the ten federal regions.

- **Area Contingency Committees** are made up of regional representatives which specifically plan for oil spills.
- **The Federal Response Disaster Group** is made up of over 30 federal agencies with responsibilities for preparing for or responding to major national disasters.
- **The Federal Radiological Preparedness Group** is made up of 17 federal Departments and Agencies. They respond to radiological emergencies under the Federal Radiological Emergency Response Plan (FRERP).
- **The American Red Cross** EXIT disclaimer is America's largest humanitarian organization, helping people each year prevent, prepare for and cope with emergencies.

Click here for more information

Additional Concerned Citizens Web Resources
Water | Prevention, Pesticides & Toxics | Pesticides | Solid Waste | Chemical Emergency | Superfund | Global Warming | Region 1: New England States | Region 2: NJ, NY, PR, VI | Region 6: AR, LA, NM, OK, TX | Region 8: Northern/Mountain States

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Concerned Citizens Home |Community Right To Know | At Home | Transportation | Thinking Globally | Acting Locally | At the Workplace | Protecting Our Children | Resources for Non-Profits | Environmental Violations | Environmental Emergencies

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#11

COASTAL CHEMICAL QUALITY SYSTEM PROCEDURE MANUAL
General Operations
Accident / Incident and Near Miss Reporting

Document No: GOP100-02 | Current Date of Issue: **Oct. 26, 2009**
Date of Origin: Oct. 1, 2004 | Page 1 of 3

Approved by: Charles H. Toups

Purpose
Written documentation of any near misses, accidents or incidents by Coastal Chemical employees. An opportunity to improve environmental, health and safety practice based on a condition or an incident with potential for more serious consequence.

Scope
After a near miss, vehicle accident, chemical spill, chemical contamination, property damage or personal injury, an Accident / Incident Report needs to be filed to the Health, Safety & Environmental Department.

Responsibility
Health, Safety & Environmental Department
Facility Managers

Definitions:
A close call or near miss: is an incident that could have resulted in an injury, death, or property damage, but didn't. Close calls are red flag warnings about unsafe conditions, actions or equipment. You should take action to correct the situation and report all close calls, no matter how minor they may seem

Accident / Incident: is an accident or incident that caused injury, death or property damage.

Procedure

1. Facility Manager or trained designees will report to the site of all vehicle accidents or incidents to aid in First aid/CPR of any injured employee, and to gather information for investigation.

2. Facility Manager or trained designee, will take pictures of the accident or incident using the disposable camera kept in all company vehicles, to aid in investigation and for future review. Facility Manager or designee will also use any other equipment (i.e. tape measurer, PPE, emergency triangles, etc.) needed to complete the investigation of the incident or accident safely and in order to complete the required reports.

3. Assessment of area will be conducted to ensure further loss is not incurred to property. Emergency Response companies will be called to conduct clean up and file a complete report, if necessary.

4. Facility Manager or designee will complete the **Accident / Incident Summary Report GOF100-02** within **48 hours** after accident or incident occurred. Facility Manager will also have to complete any Insurance or Workers Comp reporting forms as needed. The report will include information such as weather conditions, names of persons involved and any injuries. If clean up response company is called their clean up report will be included with pictures taken.

   Accident/Incident Report and supporting documentation, is kept in HS&E department, and company insurance company will keep their reports for safekeeping. Coastal Chemical reports will be kept a minimum of 5 years for safekeeping by the HSE dept along with any supporting statements, photograph, or other relevant documentation.

5. A copy of the police report for all vehicle accidents, will be obtained and a copy submitted to our insurance company with all internal reports. Reports will include witness statements and any supporting documentation, pictures or evidence. Any follow-up interviews of witnesses will be handled by company insurance department or management.

6. The completed forms should be sent to the Health, Safety & Environmental Department (HS&E Department) and Risk Manager, Ed Parr, and HR department for review.

7. HS&E and/or Management will make any recommendations to avoid reoccurrence. All incidents and root causes will be discussed during safety meetings to prevent reoccurrence and lessons learned.

8. **NEAR MISSES**: Ignoring near misses & close calls can lead to serious results, including injuries and fatalities. Near misses / close calls should be reported on the GOF100-02 form or the Corrective Action Report and given to facility manager and HS&E department. There is a "no blame policy" for reporting near misses, and feed back to the reporting employee part of the process. A near miss/close call should not be considered a negative or inconvenient event. It is an important opportunity to discover a hazard and correct it without anyone being injured. Prevent injuries, fatalities, and damages by reporting all near misses/close calls. Making a report will ensure that corrective action will be taken to remedy the situation. Near misses should identify:

   - Unsafe condition
   - Unsafe behavior
   - Minor accidents & injuries that had potential to be more serious
   - Events where injury could have occurred but did not
   - Events where property damage results
   - Events where a safety barrier is challenged
   - Events where potential environmental damage could result

How to Protect Yourself

1. Check work areas and equipment daily
2. Take steps to evaluate your work practices. Following all safety procedures. Do not cut corners to save time or turn a blind eye to fellow workers or contractor's unsafe practices.
3. Barricade or clean up any slip and fall hazards on floors immediately.
4. Tag any damaged or broke machinery or equipment.

5. Familiarize yourself with your company's close call reporting system.
6. Report any unsafe acts, improperly used equipment and work conditions.
7. Report and follow up on any close calls/near misses to make sure that a hazard is identified and corrected.

Related Documentation

Accident / Incident and Near Miss Summary Report gof100-02
Corrective Action Report
SRS Form (if needed)
Workers Compensation Form (if needed)

Corresponding ISO Element

4.2 Documentation Requirements
4.2.1 General
4.2.3 Control of Documents
4.2.4 Control of Records

#11

Coastal Chemical Quality System Procedure Manual
General Operations
Accident / Incident Summary Report

Document No: GOF100-02 | Current Date of Issue: **May 6, 2008**
Date of Origin: Oct. 1, 2004 | Page 1 of 1

Instructions: Submit completed form to Manager of HS&E for review.

Reporting Location: _____ **Date of Accident / Incident:** _____
Employee Name: _____ **Time of Accident / Incident:** _____

Accident / Incident Type (check all that apply): ☐ **Personal Injury** ☐ **Vehicle Accident** ☐ **Chemical Release** ☐ **Property Damage** ☐ **Near Miss** ☐ **Other**

Brief Description of Events: _____

Documentation Review: (The following documents have been reviewed and are on file.)

Root Cause: (List Root Cause and Brief Explanation for Arriving at Conclusion)

Corrective Action(s) Taken: _____

Follow Up Recommendations:
(This section to be completed by Coastal Safety Task Group and returned to Manager of HS&E at the reporting company.)

Form completed by: _____ (Name) _____ (Title) _____ (Date)

Received By / Date: _____ _____

#11

3.0 Spill Prevention, Control and Countermeasures Plan, Transfer Procedures, and Incident Reporting.

3.1 Coastal Chemical Co., L.L.C. SPCC Procedures and Training Policy

A. It is the policy of this company that no employee of this facility will be permitted to operate the storage, processing or handling of equipment unless that person can demonstrate the following job knowledge:

- Has the ability to handle the facility non-transportation related equipment.
- Has a thorough knowledge of the grades, names and product characteristics of all bulk materials handled.
- Has knowledge of the capacities of all storage tanks and the products assigned to them.
- Has the ability to gauge and convert the measurements to gallons, pounds and metric quantities.
- Has knowledge of the location and operation of all piping and valves for the entire bulk plant facility.
- Has knowledge of the location and operation of all safety equipment.
- Has knowledge of the location and operation of all oil spill containment equipment and the methods of their correct use.
- Has knowledge of all operating and spill contingency procedures outlined in this plan.
- Has been trained on the overall loading and unloading procedures as outlined in the SPCC Plan.
- Has knowledge of the requirements for reporting, containing, cleaning up and
- Disposing of material generated from a spill.
- Has knowledge of the location and operation of the drain valve for the containment sump. Has been informed that the valve is to remain closed and only opened in the event of massive rain and that water drained from the containment area must be documented in the SPCC Plan.

A. WHAT IS A SPCC PLAN?

Spill Prevention Control and Countermeasure Plan, a basic plan developed by each facility that explains the contents and capacities of a bulk plant operation and its potential to contaminate a navigable water.

B. WHY ARE THEY REQUIRED?

The SPCC PLAN is required under Federal law by 40 CFR, Part 112 of the Federal Register. The regulation is in compliance to the Oil Pollution Act of 1990. To make sure the operator and their employees understand their potential for spills and possible contamination of navigable waters.

C. WHO MUST HAVE A SPCC PLAN?

Any operator, distributor, transporter who handles diesel, gasoline, kerosene, varsol or hydrocarbon oil products. A distributor who has storage capacities of one single tank exceeding 660 gallons, a combination of containers exceeding 1320 gallons or underground storage capacity exceeding 42,000 gallons.

D. WHO MUST BE TRAINED?

All employees of the company to include, management, drivers, dispatchers, warehouse workers, office, clerical and salesman.

E. HOW OFTEN IS TRAINING REQUIRED?

Training is required annually, for current employees.

New employees should be trained within ninety days of employment.

F. HOW OFTEN IS A SPCC PLAN REQUIRED TO BE UPDATED?

The SPCC PLAN should be re-certified every three years by a registered professional engineer. Anytime the facility is changed or modified the plan should be update and the employees informed.

G. HOW OFTEN SHOULD THE SPCC PLAN BE REVIEWED AND BY WHOM?

The plan should be reviewed annually by management and top employees. The plan should be updated if changes have been made within the calendar year.

3.2 TRAINING TOPICS

A. INSPECTIONS AND RECORDS

In the event of a rain or massive flood, records should be kept that identify the amount of water released from the containment areas. Records should be dated and signed by the manager or supervisor. In the event of a spill, overflow or leak document, document everything that occurred. Keep all records for a minimum of five years.

B. SPILL PREVENTION PROCEDURES

All employees should follow the procedures as outlined in the contingency plan to the letter. Deviations should be noted and reasonable explanations given.

C. FACILITY DRAINAGE

All drainage passages should be kept closed at all times. Water drained from the containment area should be done on an as needed basis only. The drain valves should be kept closed at all times. Ditches and storm sewers should be kept open and clear of debris and monitored regularly for build up of oil or fuel residue.

D. FACILITY OPERATION AND PROCESSES

Employees should follow the rules and procedures as outlined in the company policy. Procedures that are routine and outlined by the company are to be followed to the letter.

E. TRANSFER PROCEDURES

These procedures are outlined in the section of the SPCC Plan for Loading and Unloading.

F. SECURITY

All valves are to be locked when the product is not in use and/or after normal business hours. All gates should be locked and secured after hours and on long weekends. All precautions should be taken to prevent any theft or illegal entry. All electrical switches and controls should be turned off after hours.

G. EMERGENCY ACTION PLAN

These procedures are outlined in the SPCC Plan. In the event of an emergency dial 911, then the supervisor or manager. If the situation can be kept under control safely without danger to you, your surrounding neighbors or the environment proceed with caution and extreme care. If in doubt, wait for help.

3.3 COASTAL CHEMICAL CO., L.L.C. - TRANSFER PROCEDURES

I. Unloading Into Plant Storage From Tank Truck Or Tank Car

A. General

Before placing order for product, gauge tanks (s) and compute inventory to be sure the tank (s) will hold amounts being ordered.

All unloading connections, valves, lines, etc. are to be properly labeled, color coded, or numbered and identified.

B. Unloading Procedures

1. Position vehicle, set parking brakes, chock wheels, and ground the vehicle.

2. Check area for ignition hazards (such as welding, smoking, electrical short). Do not unload until all possible sources of ignition have been eliminated.

NOTE: SMOKING IS NEVER PERMITTED INSIDE THE PLANT AREA OR IN CAB OF DELIVERY TRUCKS.

3. Check connections, manifolds, and valves, verifying that product to be unloaded will be pumped or unloaded into the correct tank.

4. Gauge the contents of the receiving tank to be sure it can accommodate the quantity that to be unloaded to prevent possible overfilling.

5. Close all tank gauge openings and / or fill caps except those that will have hoses connected to them, so as to prevent overflows.

6. Place drip pans under hose connections and make proper hose connections:

NOTE: A VISUAL INSPECTION OF UNLOADING HOSES SHOULD BE MADE BEFORE OPENING UNLOADING VALVES TO CHECK FOR:

- Badly weathered or cracked hose.
- Deep cuts or abrasions on the hoses.
- Outer rubber jackets badly blistered.
- Ends of hose partly pulled out of the couplings.

NOTE: HOSES WHICH SHOW THESE DEFECTS SHOULD NOT BE USED.

7. Open all compartment emergency valves. If parked on an incline, be sure that the product does not spill out of compartment positive vents. If product is spilling out, close vent immediately and correct condition before proceeding to unload.

8. Open proper valves on tank vehicle and tank, and start delivery of product.

9. Immediately check all connections for leaks. If leaks are found, stop the unloading operation and make the necessary repairs before continuing the process.

CAUTION: WHERE DELIVERIES ARE BEING PUMPED OFF, HOSES ARE UNDER PRESSURE AND EXTRA PRECAUTIONS SHOULD BE TAKEN TO CONTINUALLY OBSERVE HOSES FOR LEAKS OR RUPTURE.

10. **DO NOT LEAVE THE VEHICLE DURING DELIVERY.** Be Alert. Remain in a position to observe the hose connections, vents and general area. Stay where you can quickly reach the unloading valve, nozzle, or compartment emergency valve, so you could stop the product flow immediately in an emergency. If necessary to leave the unloading process, the pumps should be stopped and the valves closed.

11. Check storage tank vents throughout the delivery for proper venting. If the vent sprays any liquid or oils, stop unloading and report the condition to your supervisor.

12. When unloading is completed inspect all compartments to make sure that they are empty. Allow the pump to run long enough to empty unloading lines and hoses.

13. Upon completion of delivery, close unloading valves. Disconnect and drain hoses from tank vehicle and empty drip pans.

14. Replace all fill caps and gauge covers securely. Replace or report missing or worn gaskets.

15. Close all compartments emergency valves by use of the remote releases.

16. Close all compartments doors and fasten hose tube ends properly.

17. Make visual safety inspection of vehicle by completely walking around it. If tank truck, drive way slowly with caution.

II. Loading Into Tank Truck

A. Use Of The Loading Hoses

The maximum number of loading hoses that you can safely operate at one time depends on the design of the loading rack.

If the rack meters are equipped with preset-stop mechanisms, you can safely operate two or more loading hoses simultaneously. This applies to either top or bottom loading.

When product is controlled by manually operated valves, you can safely operate no more than two loading hoses simultaneously provided you can adequately see into the two compartments being filled. Topping off of compartments must be done one at a time. Manually operated loading valves must be controlled only by hand. Never block or tie open a manually operated valve.

B. Loading Procedures

1. Secure instructions from the dispatcher.
2. Drive truck to loading rack as directed.
3. Shut off engine, all lights and electrical accessories.

NOTE: NEVER RACE THE ENGINE OR LEAVE THE THROTTLE OPEN WHEN CUTTING OFF THE IGNITION. THIS CAN FLOOD A HOT MUFFLER WITH UNBURNED GASES, WHICH CAN BE IGNITED BY BLOWING DEPOSITS INTO THE MUFFLER. A FLASH OR FLAME COMING OUT OF THE TAIL PIPE AS A RESULT OF ENGINE BACKFIRING HAS CAUSED SERIOUS LOADING RACK FIRES.

4. Set the parking brake and chock wheels.

5. Ground the vehicle by attaching grounding clamp to knurled stud provided on the truck.

DO NOT LOAD WITHOUT GROUNDING THE TRUCK.

6. Where provided set counters on loading rack meters to zero. For meters equipped with preset-stop mechanisms, set counter for amount to be loaded into compartments.

7. Where provided lower hinged platform or stairs to bridge loading rack on top of truck.

8. Open all dome covers cautiously. Make certain that vapor pressures are relieved before fully opening.

9. Be sure compartments are empty and the compartment emergency valves are set properly.

10. Close all dome covers except those on compartments to be immediately loaded.

11. Make the connection between the transport trailer and the loading pump.

NOTE: Do not try to "stretch" the loading hoses and stress connection points. If you cannot properly reach a connection without stress on the hose or the connection point, MOVE YOUR TRUCK. Do not move your vehicle under any circumstances with a hose connected or with a tote cover open or tank connection still in place.

12. If required, hold loading valve open by hand unless preset-stop mechanisms on meter are provided. Tying down or blocking valves open is always prohibited. Be prepared to quickly shut off flow of product in an emergency.

13. Fill the compartment to desired quantity.

14. After filling a compartment, remove loading hose carefully

15. Close all dome covers securely.

16. Return loading hose to the proper position.

17. Replace all caps on connections.

18. Detach grounding clamp and return grounding cable to proper storage position.

19. Make a quick visual safety inspection of vehicle before entering cab.

20. If all is in order, start the engine. Wait for air pressure, oil pressure, and other gauges to show normal.

21. With caution, drive away slowly.

III. Personnel

A. All personnel are to be instructed in the following Spill Prevention Control and Countermeasure Plans.

1. No tanks or compartments are to be filled without first checking the reserves on hand.

2. No pumps are to be operated unless attended continuously.

DRIVERS WILL BE IN ATTENDANCE AT ALL TIMES WHILE LOADING OR UNLOADING PRODUCT.

3. Instructions will be held on Spill Prevention, Containment and Retrieval methods.

4. Instructions and phone numbers are to be posted in the office in regard to reporting all spills.

3.4 INCIDENT INVESTIGATION

A. Coastal Chemical Co., L.L.C. will investigate and report on all incidents of chemical spills, releases, accidents and near misses of any kind. An action plan for corrective action will be developed and implemented to prevent reoccurrence.

B. Investigations are initiated as promptly as possible, but no later than 48 hours following the incident.

C. The incident investigation team includes as a minimum:
- The employee involved in the incident, if able.
- At least one employee knowledgeable in the process of operation involved in the incident.
- A contractor representative, if the incident involved work of a contractor.
- Facility Manager

D. The incident investigation report is an ISO form GOF100-02 or RDP Quality Record # 001-08. If the situation involves DOT, then a DOT form 5800.1 will also be used.

E. The Facility Manager is responsible for addressing Incident Investigation Report Findings.

F. Resolutions and corrective actions are documented as appendices to the original Incident Investigation Report, and filed with that report. Incident investigation reports are retained for five years.

G. Facility Managers ensure that Incident Investigation Reports are reviewed with all affected personnel, whose job tasks are relevant to the incident findings, including contract employees where applicable. This review is considered a Safety meeting and is documented through Safety Meeting Minutes, which are a Quality Record.

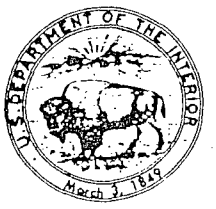
OCD
#12

AVAILABILITY OF HYDROLOGIC DATA IN SAN JUAN COUNTY, NEW MEXICO

U.S. GEOLOGICAL SURVEY
Open-File Report 84-608

Attachment No. 3
Coastal Chemical Inc.
GW-222

Prepared in cooperation with
SAN JUAN COUNTY COMMISSION, NEW MEXICO



AVAILABILITY OF HYDROLOGIC DATA IN SAN JUAN COUNTY, NEW MEXICO

By

R. L. Klausing and G. E. Welder

ABSTRACT

Information collected in San Juan County, New Mexico, at 1,877 water wells, 39 streamflow-gaging stations, and 172 springs are presented. The collection sites and geology are shown on a base map with a scale of 1 inch = 2 miles.

INTRODUCTION

San Juan County is in the northwestern corner of New Mexico (fig. 1). Surface water from the San Juan, Animas, and La Plata Rivers has been a principal source of water for the county, but the water in these streams is fully appropriated. Ground water is present in San Juan County in several bedrock formations and in the alluvium of the river valleys.

The purpose of this report is to describe the types of hydrologic data that have been collected in San Juan County, to present examples of the data, to show the locations of the data-collection sites, and to indicate where more complete records may be obtained. This report is intended to serve as a data base that may be helpful in assessing the quantity, quality, and availability of the county's water resources.

The study was conducted by the U.S. Geological Survey in cooperation with the San Juan County Commission from July 1, 1983 to July 1, 1984.

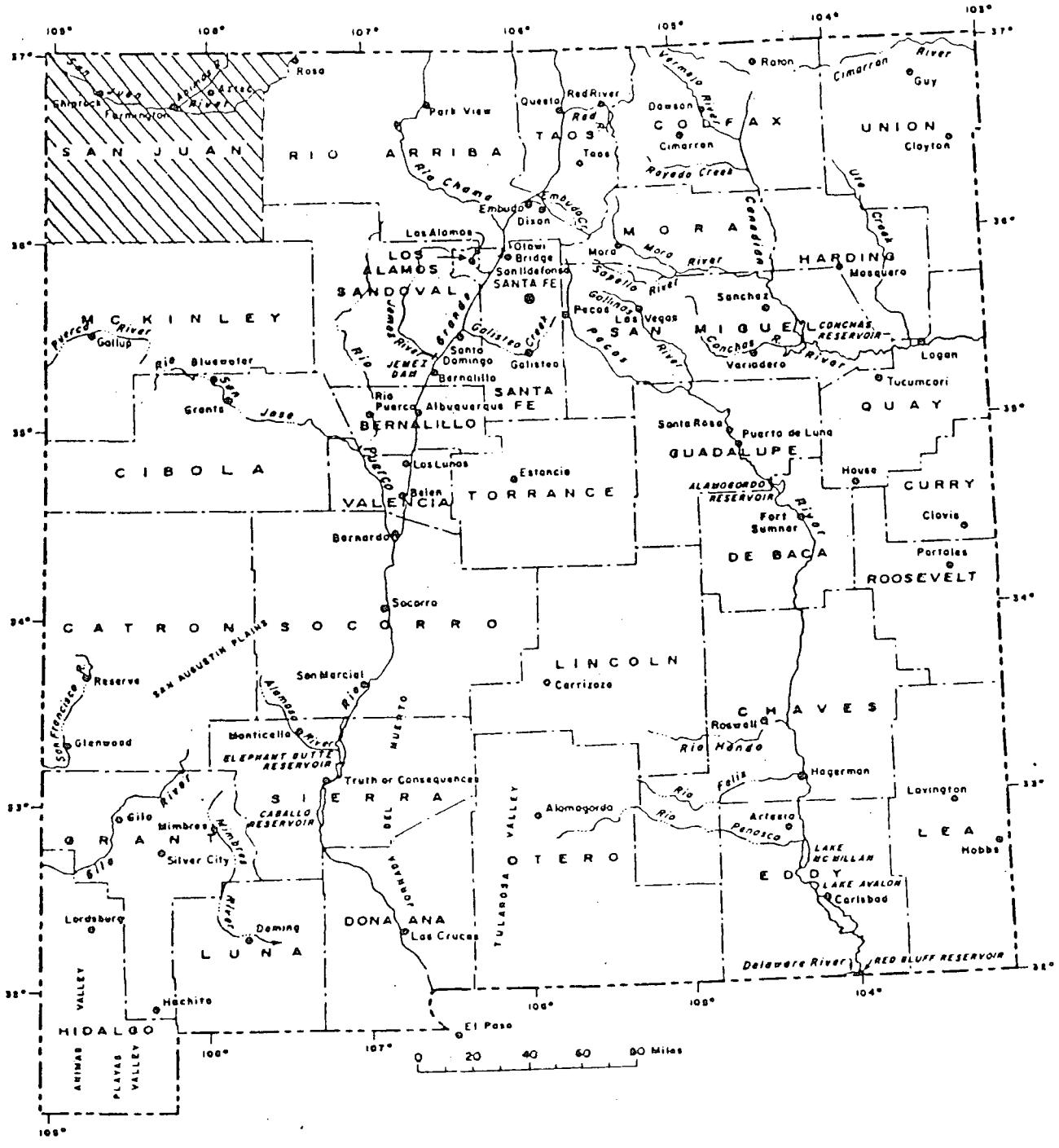


Figure 1.--Location of San Juan County, New Mexico.

PRESENTATION OF THE DATA

Information is presented in this report about water wells, springs, and streamflow-gaging stations in San Juan County. The locations and descriptive information for 1,877 wells, 172 springs, and 39 streamflow-gaging stations are listed in the tables. The locations of wells and gaging stations are shown on plate 1, as are springs with yields exceeding 10 gallons per minute. The generalized distribution of geologic formations that are exposed at the land surface is also shown on plate 1.

The hydrologic information in table 1 is a duplication of some of the data that were compiled by the U.S. Geological Survey for table 1 of the report by Stone and others (1983). Table 1 is a compilation of information on wells and springs that were in existence in San Juan County prior to 1978. Included in the table are 887 wells and 172 springs; 406 wells and 144 springs are on the Navajo Indian Reservation in the western half of the county. The lines at the left margin of table 1 indicate wells or springs that are a few miles outside of the county; this information may be useful in defining hydrologic conditions near the eastern or southern county boundaries.

Hydrologic data furnished by the New Mexico State Engineer Office are included in table 2. The data are preliminary and subject to revision. Generally, the wells listed in this table were drilled from 1978 to 1983. Included in the table are 990 wells in San Juan County; 43 wells are in the western half of the county on the Navajo Indian Reservation. Most of the wells in the vicinity of the towns of Bloomfield, Farmington, and Aztec are shallow domestic wells drilled in the Animas, La Plata, and San Juan River valleys. The lines at the left margin of table 2 indicate wells that are a few miles east of the county; this well data may be useful in defining hydrologic conditions near the eastern boundary of the county.

Descriptions of 39 streamflow-gaging stations are listed in table 3. Twenty-one of the stations were active in 1984 and the remainder were in use at various times in the past. The stations are located on the Animas, Chaco, La Plata, and San Juan Rivers, and their tributaries which flow through San Juan County. Twenty-eight of the stations are located in San Juan County, New Mexico, four in McKinley County, New Mexico, six in Colorado, and one in Utah. The descriptions include a detailed location, the size of the drainage area upstream from the station, the period of record, the type and altitude of the gage, miscellaneous remarks concerning the quality of the record and the availability of water-quality data, and the average and extreme discharges. Daily discharges are given for the 1982 water year (October 1, 1981, through September 30, 1982) or the last year of record for a discontinued station. The stations listed in the table are the principal collection sites for surface-water data published by the U.S. Geological Survey.

Additional information about many of the wells listed in tables 1 and 2 is available from the sources given in table 1 and from the U.S. Geological Survey and the State Engineer Office in Albuquerque, New Mexico. Stream-discharge data for the period of record of the 39 stations listed in table 3 are available from computer files of the U.S. Geological Survey. Water-quality data that have been collected at the wells and streamflow-gaging stations indicated by the solid symbols on plate 1 are also available from the U.S. Geological Survey or the New Mexico Bureau of Mines and Mineral Resources in Socorro.

USE OF THE MAP AND DATA TABLES

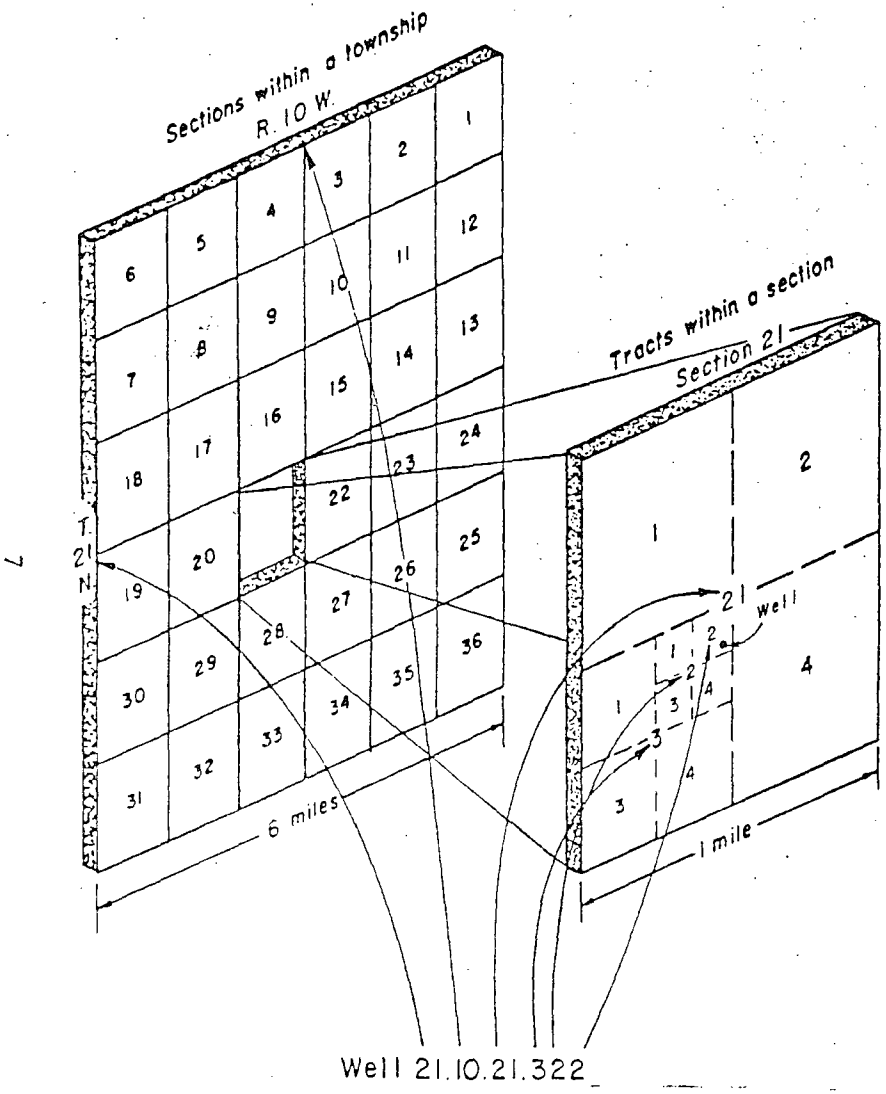
The locations where hydrologic data have been collected are shown on plate 1. The hydrologic conditions at a known well site, for example, may be projected to an adjacent site where new water supplies might be needed, if geologic conditions are similar. Such extrapolations, however, need to be made with caution.

The stream-discharge data given in table 3 (station locations on plate 1) provide information on streamflow characteristics, such as average and peak flows and surface-water quality. This information may be used to determine the relative amounts of water than can be delivered to surface-water users, to estimate quantities of water that may be available for future use, to determine high- and low-water stream stages, and to aid in designing roads, bridges, and other structures.

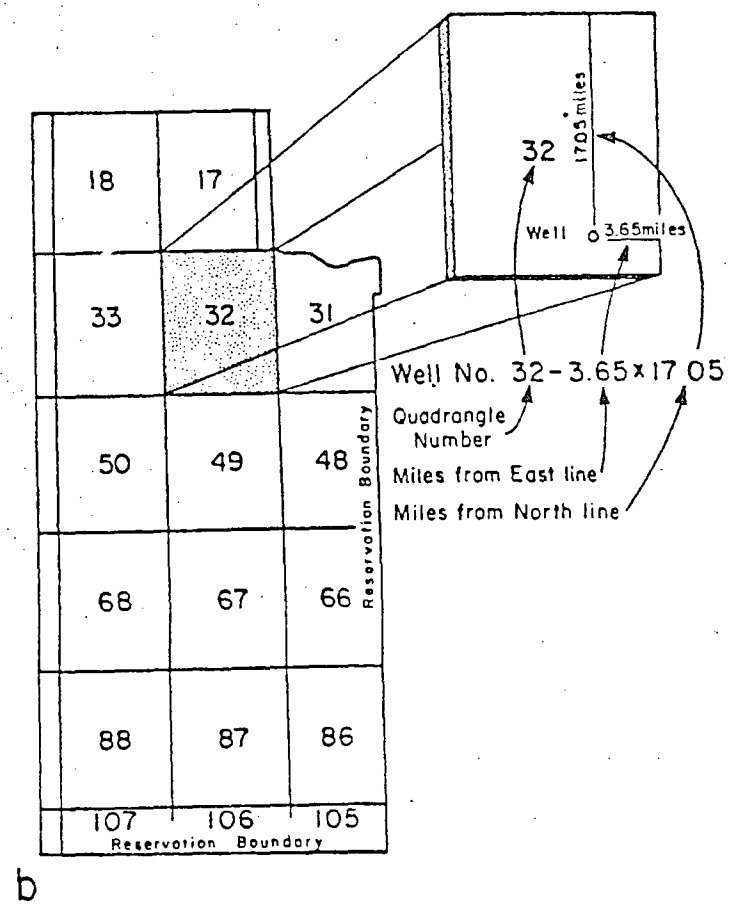
WELL-NUMBERING SYSTEMS

Two numbering systems are used in this report to locate a well. The first uses the common subdivision of lands into townships, ranges, and sections. In this system, the location number is divided into four segments separated by periods. The first segment indicates the township north of the New Mexico Base Line and the second denotes the range west of the New Mexico Principal Meridian. The third segment indicates the section within the township and the fourth segment indicates the tract within which the well is located. To determine the fourth segment of the location number, the section is divided into quarters numbered 1, 2, 3, and 4 for the NW¼, NE¼, SW¼, and SE¼ respectively. The quarter section may be further subdivided in a similar manner. The number of digits in the fourth segment of the location number indicates the degree of accuracy in locating the well. One digit indicates the location only could be determined to a 160-acre tract; two digits, 40-acre tract; three digits, 10-acre tract; and four digits, 2½-acre tract. A well with a location number 21.07.28.213 is located in the southwest ¼ of the northwest ¼ of the northeast ¼ of section 28, Township 21 North Range 7 West (fig. 2).

A different numbering system is used for the main part of the Navajo Reservation. This area is divided into 15-minute quadrangles, each of which is assigned a number. The well number consists of the quadrangle number followed by the distance in miles from the east line and the distance in miles from the north line, in that order. Thus, a well numbered 32 - 3.65 x 17.05 is in quadrangle number 32, 3.65 miles from the east line and 17.05 from the north line as shown in figure 2.



Township and Range System of numbering wells in New Mexico



System of numbering wells on the Navajo Indian Reservation

Figure 2.--Well-numbering systems.

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Wright, A. F., 1979, Bibliography of the geology and hydrology of the San Juan Basin, New Mexico: U.S. Geological Survey Bulletin 1481, 123 p.

Table 1.--Records of water wells and springs in San Juan County prior to 1978

EXPLANATION

LOCATION.--The location of a well or spring is described by using the system of quartering by sections (example: 24.13.9.134) or the numbering system for the Navajo Reservation (example: 33-7.16x8.96). The systems are explained in the text and shown in figure 2. All locations are defined as accurately as possible with the information available.

LATITUDE-LONGITUDE.--Latitude and longitude are reported in degrees, minutes, and seconds (example: 363010 1084525 = lat 36° 30' 10" N, long 108° 45' 25" W). If the exact location of a well or spring is unknown, the latitude and longitude at the center of the smallest subdivision of a section as indicated in the location number is given. Latitudes and longitudes were not computed for sites that could not be located more accurately than a quarter section.

NUMBER OR NAME.--The number or name assigned to a well may be the owner's name or number, the BIA or Navajo name or number, a traditional name, or the name of a nearby landmark. Springs and dug wells are identified under this heading.

DEPTH.—Depth is the total depth of a well (in feet) below land surface that was obtained from driller's records, measured (M) by U.S. Geological Survey, reported by individuals, or estimated (E). Wells that have been plugged back or deepened have the original depth noted in "Remarks". If the depth is questionable, it is marked with a "Q".

ALTITUDE.--Altitude of the land surface (in feet) above sea level at the well or spring. If an altitude was not recorded in field data or a location was not precise, the altitude reported was at the center of the smallest subdivision of a section as indicated in the location number. Altitudes are estimated (E) at sites with vague locations.

DEPTH TO WATER.--Depth to water below land surface (in feet). Values with decimal point accuracy were measured, others reported (R) or estimated (E). A plus sign (+) indicates the water level is above the land surface. "F" indicates the well was flowing on the date given.

DATE.--The date given is that of the water-level measurement noted on the same line. If no water level is noted, a date in this column is given to establish the well's existence at that particular time.

PRODUCING INTERVAL.--Producing interval is the depth (in feet) below land surface in the well that is open to the water-bearing unit.

PRINCIPAL WATER-BEARING UNIT(S).--The abbreviations of the geologic formation(s) that contain the water-bearing units are as follows:

Quaternary:
- Qal - Alluvium
- Qc - Colluvium (landslide, talus)

Tertiary:
- Tc - Chuska Sandstone
- Tsq - San Jose Formation
- Tn - Nacimiento Formation

Tertiary-Cretaceous:
- TKoa - Ojo Alamo Sandstone
- TKi - Intrusives

Cretaceous:
- Kk - Kirtland Shale
- Kkm - Farmington Sandstone Member
- Kkf - Kirtland Shale, Fruitland Formation, undivided
- Kf - Fruitland Formation
- Kpc - Pictured Cliffs Sandstone
- Kch - Cliff House Sandstone
- Kmf - Menefee Formation
- Kpl - Point Lookout Sandstone
- Kg - Gallup Sandstone
- Kd - Dakota Sandstone

Jurassic:
- Jm - Morrison Formation
- Jmb - Brushy Basin Shale Member
- Jmw - Westwater Canyon Sandstone Member
- Jmr - Recapture Shale Member
- Jms - Salt Wash Sandstone Member
- Jb - Bluff Sandstone
- Js - Summerville Formation
- Je - Entrada Sandstone

Triassic:
- T w - Wingate Sandstone

Permian:
- Pdc - De Chelly Sandstone

Pennsylvanian:
- Penn - Pennsylvanian rocks undivided

SPECIFIC CONDUCTANCE.--Specific conductance of the water, which is a function of dissolved solids, is reported in micromhos per centimeter at 25° Celsius. An asterisk (*) indicates that a chemical analysis of common constituents is reported in table 2 of Stone and others (1983). A double asterisk (**) indicates that an analysis, which includes trace elements, is reported in table 3 of Stone and others (1983).

DATE.--The sampling date.

LOGS AVAILABLE.--The types of logs available are indicated below. Many are in the files of the U.S. Geological Survey.

DLR, driller; TOP, formation tops; COR, core analysis; SAND, sand analysis; LTH, lithologic logs; N, neutron; GR, gamma ray; RES, resistivity; IND, induction; MIC, microlog; SP, spontaneous potential; DEN, density; CAL, caliper

REFERENCE.--Much of the data in this table was compiled from sources listed below. Lower case letters indicate the sources as follows:

h, Waring and Andrews (1935); j, Baltz and West (1967); l, Shomaker, J. W., (U.S. Geological Survey) (written commun., 1967); m, Rapp (1959); n, Callahan and Harshbarger (1955); o, Halpenny and Harshbarger (1950); q, Kister and Hatchett (1963); r, Davis, Hardt, Thompson, and Cooley (1963); s, Brimhall (1973); u, Kelly (1977); a*, Shomaker (1976); c*, Brown and Stone (1979).

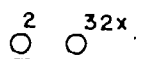
DRAWDOWN, DISCHARGE, DURATION.--These values are reported unless followed by an asterisk (*) which indicates that more complete aquifer-test data are available in table 4 of Stone and others (1983). Discharges are reported (R), measured (M), or estimated (E); artesian flow is indicated by "F".

REMARKS.--This column may include the following abbreviations:

R, reported; M, measured by U.S. Geological Survey; E, estimated; DST, drill-stem test; Q, quadrangle or questionable, depending on context; WBF, water-bearing formation; QW, quality of water; SWL, static water level; F, flow or flowing; WL, water level; SPC, specific conductance in micromhos at 25° Celsius, TDS, dissolved solids in milligrams per liter; TD, total depth.

HYDROLOGIC DATA EXPLANATION

WATER WELL--Number is depth of well below land surface, in feet; letters indicate geologic source of water. (See principal water bearing unit(s) in table 1, and aquifer in table 2.)



WATER WELLS--Underlined symbol with number indicates the number of closely spaced wells at one location. Number with "x" is the number of wells in that section (one square mile)

OBSERVATION WELL--Water-level measurements have been made periodically*

SPRING--Discharge generally greater than 10 gallons per minute (tables 1 and 2); letters indicate probable geologic source of water. (See geologic formation abbreviation in tables 1 and 2.)

STREAMFLOW GAGING STATION--Active in 1982; number refers to station description and period of record in table 3*

STREAMFLOW GAGING STATION--Discontinued prior to 1982, number refers to station description and period of record in table 3

NOTE: Solid symbols (● ▲ ◉) indicate water-quality data are available *

* Ground-water level and surface-water discharge measurements, and water-quality data available from Water Resources Division of U.S. Geological Survey, Albuquerque, New Mexico.

Coastal Chemical - GW-222

Table 1.--Records of water wells and springs in San Juan County prior to 1978 - Continued

Location	Latitude-Longitude	Number or name	Depth (feet)	Altitude (feet)	Depth to Water (feet)	Date	Producing interval (feet)	Principal water-bearing unit(s)	Specific conductance (umhos at 25°C)	Date	Logs available	Reference	Drawdown (feet)	Discharge (gal/min)	Duration (hours)	Remarks
29.11.25.132	364158 1075653	Bur. Rec. #39	10M	5,470	1.8	04-16-68	-	Tn	6,300	04-16-68	-	-	-	-	-	-
29.11.30.211	364212 1080152	Narciso Archibeque	46	5,465	43	-	-	Qal	748 *	04-09-68	-	-	-	-	-	-
29.11.30.233	364152 1080152	Delbert Blake	9M	5,390	8.8	04-09-68	-	Qal	886 *	04-09-68	-	-	-	-	-	-
29.11.31.3321	364043 1080217	-	1,720	5,437	-	-	-	Kpc	-	-	TOP	-	-	-	-	Converted to water.
29.11.31.3342	364037 1080214	Edgar Lund	600	5,458	29.1	10-09-74	300	TKoa	-	-	-	-	-	-	-	Oil test plugged back.
29.11.31.3424	364042 1080158	Richard Sego	326	5,480	-	-	-	TKoa	-	-	-	-	-	-	-	"Not fit to drink".
29.11.34.4144	364046 1075827	-	800	5,640	-	-	-	TKoa	-	-	TOP	-	-	-	-	Source for H_2O injected; plugged b from TD of 1,355 f
29.12.06.133	364521 1080847	George McColm	16	5,440	6	11-24-53	-	Qal	2,250 *	11-24-53	-	m	-	10	-	-
29.12.07.4133	364417 1080817	7th Day Avent Church	234	5,600	170.5	10-08-74	-	Kkf, TKoa	2,500	10-08-74	-	-	-	-	-	-
29.12.16	-	Pan Am Pet.	-	-	-	-	1,435-1,448	Kpc	- *	04-30-59	-	m	-	-	-	TDS = 29,800 mg/L, 1959.
29.12.19.3211	364242 1080833	Thomas F. Kirby	62	5,360	45.4	04-05-68	-	Qal	2,100	04-05-68	-	-	-	-	-	-
29.12.19.3231	364235 1080837	Thomas F. Kirby	44	5,350	32.1	04-05-68	-	Qal	900	04-05-68	-	-	-	-		- -
29.12.20	-	-	-	-	-	-	1,550	Kpc	- *	- -590	-	m	-	-	-	Analysis only. TDS 30,200 mg/L, 1959.
29.12.20	-	Pan Am Pet.	1,415	5,457	-	-	1,378-1,388	Kpc	59,200 *	02-22-59	-	-	-	-	-	Gas well, sample from pit.
29.12.21.3	-	-	-	-	-	-	-	-	4,090 **	03-15-74	-	-	-	-	-	Analysis only.
29.12.28	-	Pan Am	-	-	-	-	-	Kpc	- *	04-30-59	-	-	-	-	-	Gas well; TDS 37,80
29.12.28.2121	364215 1080609	D. E. Brownlee	120	5,392	18.8	11-07-74	-	TKoa	-	-	-	-	-	-	-	Unused.
29.12.29	-	Pan Am	44	-	-	-	-	Qal	- *	04-30-59	-	m	-	-	-	Reported casing dept TDS = 2,210 mg/L.
29.12.30	-	-	-	-	-	-	1,240	Kpc	- *	- -59	-	m	-	-	-	WBF depth = 1,240 f TDS = 45,600 mg/L.
29.12.33.2411	364111 1080553	-	850	5,360	F	10-21-74	-	Kkf	12,250	10-21-74	-	-	-	SE	-	Hammond Canal Well.
29.12.34.421	364056 1080450	Bureau of Reclamation	13M	5,370	5.3	04-17-68	-	Qal	2,930 *	04-17-68	-	-	-	-	-	Stovepipe casing.
29.12.34.4341	364036 1080500	Chas. Christianson	100	5,480	65.5	10-21-74	-	TKoa	-	-	-	-	-	-	-	-
29.12.35.342	364042 1080410	Bureau of Reclamation #26	6M	5,380	3.6	04-18-68	-	Qal	4,620 *	04-18-68	-	-	-	-	-	Stovepipe casing.

Depth to Groundwater ≈ 50'

TDS (Total Dissolved Solids) = 0.75 (2,1xx + 900 / 2)

TDS = 1175 mg/L

Coastal Chemical - GW-222

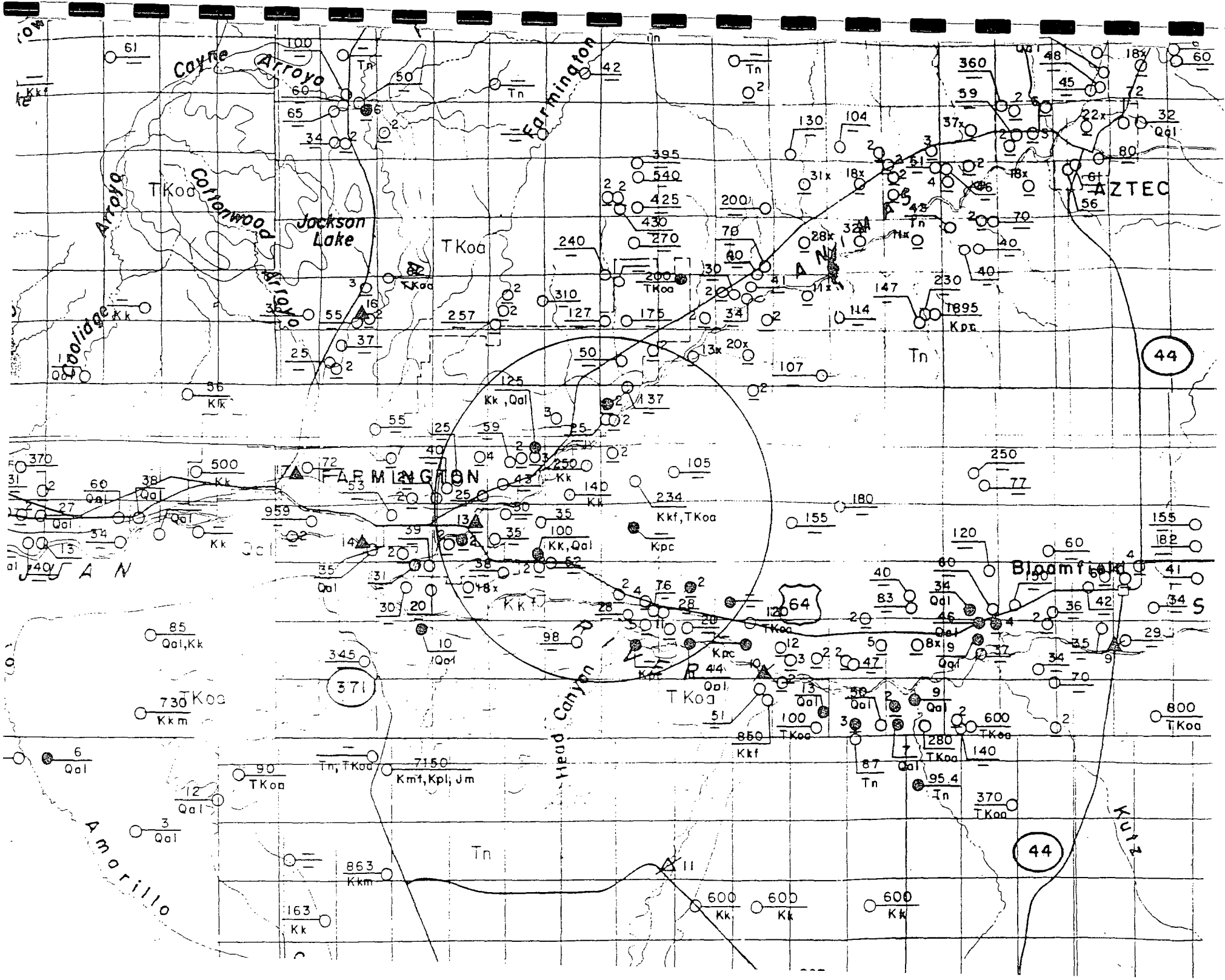
Table 1.--Records of water wells and springs in San Juan County prior to 1978 - Continued

Location	Latitude-Longitude	Number or name	Depth (feet)	Altitude (feet)	Depth to Water (feet)	Date	Producing interval (feet)	Principal water-bearing unit(s)	Specific conductance (umhos at 25°C)	Date	Logs available	Reference	Drawdown (feet)	Discharge (gal/min)	Duration (hours)	Remarks
29.12.35.342a	364042 1080410	Bureau of Reclamation #27	6M	5,390	3.5	04-18-68	-	Qal	2,140 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.35.3434	364034 1080412	J. L. Mangum	74M	5,415	45.2	04-09-68	-	Qal	2,230 *	04-09-68	-	-	-	-	-	-
29.12.35.344	364035 1080408	Bureau of Reclamation #28	14M	5,400	9.9	04-18-68	-	Qal	2,190 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.35.4443	364033 1080339	E. D. Brimhall	50	5,420	28.0	10-09-74	-	Qal	4,020	10-09-74	-	-	-	-	-	-
29.12.36.144	364102 1080305	Bureau of Reclamation #88	9M	5,390	7.8	04-18-68	-	Qal	5,620 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.36.311	364055 1080330	Bureau of Reclamation #23	13M	5,385	6.1	04-18-68	-	Qal	1,410 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.36.311a	364055 1080330	Bureau of Reclamation #89	7M	5,380	1.8	04-18-68	-	Qal	10,500 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.36.332	364042 1080322	Bureau of Reclamation #22	18M	5,405	14.3	04-18-68	-	Qal	872 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.36.4343	364034 1080249	C. J. Burnham	280	5,425	40	10-10-74	-	TKoa	4,700	10-10-74	-	-	-	-	-	-
29.13	-	Brimhall Ranch	365	-	280	07-21-52	-	-	-	-	-	-	-	3	-	-
29.13.1Q	-	H. L. Baily	-	-	-	-	-	Kk	-	-	-	n	-	-	-	-
29.13.7.1442	364430 1081450	Dept. of Interior	72	5,250	17.6	10-29-74	-	Kk	5,200	11-05-65	-	-	-	-	-	-
29.13.11.221	364450 1081008	F. L. Lee	125	5,380	15	02-19-59	-	Kk, Qal	1,000 *	02-19-59	-	n	-	-	-	-
29.13.12.2344	364428 1080912	Dr. Williams	250M	5,566	-	-	-	Kk	-	-	-	-	-	-	-	Well is plugged with sand.
29.13.12.3441	364406 1080930	Full Gospel Revival	140	5,470	59.0	10-07-74	-	Kk	-	-	-	-	-	-	-	Poor producer; water is hauled in.
29.13.14.443	364312 1081010	Dowell Inc.	100	5,330	15	02-23-59	90-100	Kk, Qal	901 *	02-23-59	-	n	-	-	-	-
29.13.15.324	364325 1081138	Carl Kennedy	40	5,305	8	02-23-59	-	Qal	929 *	02-23-59	-	n	-	-	-	-
29.13.15.413	364325 1081130	McCormick School	80	5,315	8	02-23-59	-	Qal	598 *	02-23-59	-	n	-	-	-	Sample questionable.
29.13.17.441	364319 1081322	An Navajo Mission	35	5,420	6	02-23-59	-	Qal	-	-	-	n	-	-	-	Analysis incomplete.
29.13.18.2414	364342 1081425	-	959	5,249	-	-	-	-	-	-	TOP	-	-	-	-	Source for injection H_2O; plugged back.
29.13.28.2	-	O. J. Carson	10	5,300E	6	11-25-33	-	Qal	- *	11-25-33	-	n	-	-	-	-
29.13.36.322	364054 1080926	Spring	-	5,460	-	-	-	Tn	3,000	04-10-68	-	-	-	-	-	No discharge observed 4-10-68.
29.14.02.1422	364533 1081642	Locke Arroyo Well	56M	5,460	46.4	11-19-74	-	Kk	-	-	-	-	-	-	-	Abandoned.

Coastal Chemical - GW-222

Table 2.—Records of water wells in San Juan County, 1978-83 - Continued

LOCATION	NAME	WELL NUMBER	USE	DEPTH	PERFORATIONS	AQUIFER
29.13.11.231	Hodges, Robert E.	SJ-0310	dom	45		
29.13.11.3	Deyapp, Lawrence	SJ-0301	dom, stk	43		
29.13.14.1	Tenski, Steve L.	SJ-0716	dom	30		
29.13.14.24	Rice, Ivan M.	SJ-1635	dom	35		
29.13.14.313	Valley Drive In Inc.	SJ-0176	dom, stk	35	28-34	
29.13.15.3	El Paso Natural Gas	SJ-0030	ind	29		
29.13.15.3	El Paso Natural Gas	SJ-0031		75		
29.13.16.34	Drake, J. A.	SJ-0453	stk	44		
29.13.16.344	Bell, Llyod	SJ-1443	dom, stk	40		
29.13.18.322	Lower Valley MDWCA	SJ-0172	exp	30		
29.13.18.322	Lower Valley MDWCA	SJ-0172-X	exp	30'		
29.13.21.21	Garcia, James	SJ-0167	dom	31	19-25	
29.13.21.22	Graham, Feliberto	SJ-1689	dom	39		
29.13.21.422	Vigil, Horacio	SJ-0737	dom, stk	20		
29.13.22.134	Maestas, Florencio E	SJ-0891	dom	33		
29.13.22.14	Esparza, Betty R.	SJ-1765	dom	39		
29.13.22.21	Graham, Arnold M.	SJ-0784	dom	43		
29.13.22.22	Burke, Dennis R.	SJ-1673	dom	46		
29.13.22.311	Sanchez, Benny	SJ-0719	dom, stk	23		
29.13.22.312	Denny, Lee L.	SJ-0757	dom	32		
29.13.22.313	D'A Gastino, Peter	SJ-0725	dom	26		
29.13.22.313	Freeman, David R.	SJ-0724	dom	28		
29.13.22.314	Head, Harry	SJ-1151	dom	32		
29.13.22.314	Norton, Emmett	SJ-1525	dom	35		
29.13.22.34	Kimbell, Lloyd	SJ-0972	dom,stk	35		
29.13.23.1	Kannard, Tom	SJ-1562	dom	38		
29.13.23.22	Barkley, Mary A.	SJ-0352	dom	62		
29.13.23.22	Pratt, Tim	SJ-1376	dom	15		
29.13.24.111	Neidish, Raymond W.	SJ-1087	irr	52		
29.13.25.233	Bolack, Tommy	SJ-1665	dom	98		
29.13.29.4	Four States Televisi	SJ-1371	san	345		
29.14.06.333	Hansen, Paul F.	SJ-1407	dom	70		
29.14.07.11	Helmer, Grodon	SJ-1568	dom	72		
29.14.07.113	Swearingen, Jack M.	SJ-0226	dom, stk	100		
29.14.07.413	Harris, Lowell	SJ-0451	dom,stk	24		
29.14.08.	Sterling, Hugh	SJ-0947	dom, stk	370		


Coyote Arroyo
Farmington
Cottonwood Arroyo
Jackson Lake
Coolidge Arroyo
TKoa
AZTEC
FARMINGTON
Bloomfield
Head Canyon
Amarillo
Kutz
Tn
Qal
Kk
Kkf
Kpc
Kkm
Kmf, Kpl, Jm
Tn, TKoa
Kk, Qal
Kkf, TKoa
44
64
371

Appendix D

XIII. A.

GUIDELINES

FOR

REMEDIATION

OF

LEAKS, SPILLS AND RELEASES

Attachment No. 4
Coastal Chemical Inc.
GW-222

New Mexico Oil Conservation Division

INTRODUCTION

The following document is to be used as a guide on all federal, state and fee lands when remediating contaminants resulting from leaks, spills and releases of oilfield wastes or products. The New Mexico Oil Conservation Division (OCD) requires that corrective actions be taken for leaks, spills or releases of any material which has a reasonable probability to injure or be detrimental to public health, fresh waters, animal or plant life, or property or unreasonably interfere with the public welfare or use of the property. These guidelines are intended to provide direction for remediation of soils and fresh waters contaminated as a result of leaks, spills or releases of oilfield wastes and products in a manner that assures protection of fresh waters, public health and the environment.

Fresh waters (to be protected) includes the water in lakes, playas, surface waters of all streams regardless of the quality of the water within any given reach, and all underground waters containing 10,000 milligrams per liter (mg/l) or less of total dissolved solids (TDS) except for which, after notice and hearing, it is found that there is no present or reasonably foreseeable beneficial use which would be impaired by contamination of such waters. The water in lakes and playas shall be protected from contamination even though it may contain more than 10,000 mg/l of TDS unless it can be shown that hydrologically connected fresh ground water will not be adversely affected.

Procedures may deviate from the following guidelines if it can be shown that the proposed procedure will either remediate, remove, isolate or control contaminants in such a manner that fresh waters, public health and the environment will not be impacted. Specific constituents and/or requirements for soil and ground water analysis and/or remediation may vary depending on site specific conditions. Deviations from approved plans will require OCD notification and approval.

****** Note:** **Notification to OCD of leaks, spills and releases does not relieve an operator of responsibility for compliance with any other federal, state or local law and/or regulation regarding the incident. Other agencies (ie. BLM, Indian Tribes, etc) may also have guidelines or requirements for remediation of leaks spills and releases.**

TABLE OF CONTENTS

Leaks, spills and releases of any wastes or products from oilfield operations are required to be reported to the OCD pursuant to OCD Rule 116 (Appendix A) or New Mexico Water Quality Control Commission (WQCC) Regulation 1-203 (Appendix B). Appendix C contains the phone numbers and addresses for reporting incidents to the OCD district and Santa Fe offices. Notification will include all information required under the respective rule or regulation. Below is a description of some of the information required:

A. RESPONSIBLE PARTY AND LOCAL CONTACT

The name, address and telephone number of the person/persons in charge of the facility/operation as well as the owner and/or operator of the facility/operation and a local contact.

B. FACILITY

The name and address of the facility or operation where the incident took place and the legal location listed by quarter-quarter, section, township and range, and by distance and direction from the nearest town or prominent landmark so that the exact site location can be readily located on the ground.

C. TIME OF INCIDENT

The date, time and duration of the incident.

D. DISCHARGE EVENT

A description of the source and cause of the incident.

E. TYPE OF DISCHARGE

A description of the nature or type of discharge. If the material leaked, spilled or released is anything other than crude oil, condensate or produced water include its chemical composition and physical characteristics.

F. QUANTITY

The known or estimated volume of the discharge.

G. SITE CHARACTERISTICS

The relevant general conditions prevailing at the site including precipitation, wind conditions, temperature, soil type, distance to nearest residence and population centers and proximity of fresh water wells or watercourse (ie. any river, lake, stream, playa, arroyo, draw, wash, gully or natural or man-made channel through which water flows or has flowed).

H. IMMEDIATE CORRECTIVE ACTIONS

Any initial response actions taken to mitigate immediate threats to fresh waters, public health and the environment.

II. INITIAL RESPONSE ACTIONS

Upon learning of a leak, spill or release of any material which has a reasonable probability to injure or be detrimental to public health, fresh waters, animal or plant life, or property or unreasonably interfere with the public welfare or use of the property, the responsible party (RP) should take the following immediate actions unless the actions could create a safety hazard which would result in a threat to personal or public injury:

A. SOURCE ELIMINATION AND SITE SECURITY

The RP should take the appropriate measures to stop the source of the leak, spill or release and limit access to the site as necessary to reduce the possibility of public exposure.

B. CONTAINMENT

Once the site is secure, the RP should take steps to contain the materials leaked, spilled or released by construction of berms or dikes, the use of absorbent pads or other containment actions to limit the area impacted by the event and prevent potential fresh water contaminants from migrating to watercourses or areas which could pose a threat to public health and safety.

C. SITE STABILIZATION

After containment, the RP should recover any products or wastes which can be physically removed from the surface within the containment area. The disposition of all wastes or products removed from the site must be approved by the OCD.

III. SITE ASSESSMENT

Prior to final closure (Section VIII), soils into which nonrecoverable products or wastes have infiltrated and which have a reasonable probability to injure or be detrimental to public health, fresh waters, animal or plant life, or property or unreasonably interfere with the public welfare or use of the property should be assessed for their potential environmental impacts and remediated according to the procedures contained in the following sections. Assessment results form the basis of any required remediation. Sites will be assessed for severity of contamination and potential environmental and public health threats using a risk based ranking system.

The following characteristics should be determined in order to evaluate a sites potential risks, the need for remedial action and, if necessary, the level of cleanup required at the site:

A. GENERAL SITE CHARACTERISTICS

1. Depth To Ground Water

The operator should determine the depth to ground water at each site. The depth to ground water is defined as

the vertical distance from the lowermost contaminants to the seasonal high water elevation of the ground water. If the exact depth to ground water is unknown, the ground water depth can be estimated using either local water well information, published regional ground water information, data on file with the New Mexico State Engineer Office or the vertical distance from adjacent ground water or surface water.

2. Wellhead Protection Area

The operator should determine the horizontal distance from all water sources including private and domestic water sources. Water sources are defined as wells, springs or other sources of fresh water extraction. Private and domestic water sources are those water sources used by less than five households for domestic or stock purposes.

3. Distance To Nearest Surface Water Body

The operator should determine the horizontal distance to all downgradient surface water bodies. Surface water bodies are defined as perennial rivers, streams, creeks, irrigation canals and ditches, lakes, ponds and playas.

B. SOIL/WASTE CHARACTERISTICS

Soils/wastes within and beneath the area of the leak, spill or release should be evaluated to determine the type and extent of contamination at the site. In order to assess the level of contamination, observations should be made of the soils at the surface and samples of the impacted soils should be taken in the leak, spill or release area. Observations should note whether previous leaks, spills or releases have occurred at the site. Additional samples may be required to completely define the lateral and vertical extent of contamination. Soil samples should be obtained according to the sampling procedures in Sections V.A. and V.B. This may be accomplished using a backhoe, drill rig, hand auger, shovel or other means.

Initial assessment of soil contaminant levels is not required if an operator proposes to determine the final soil contaminant concentrations after a soil removal or remediation pursuant to section VI.A.

Varying degrees of contamination described below may co-exist at an individual site. The following sections describe the degrees of contamination that should be documented during the assessment of the level of soil contamination:

1. Highly Contaminated/Saturated Soils

Highly contaminated/saturated soils are defined as those soils which contain a free liquid phase or exhibit gross staining.

2. **Unsaturated Contaminated Soils**

Unsaturated contaminated soils are defined as soils which are not highly contaminated/saturated, as described above, but contain benzene, toluene, ethylbenzene and xylenes (BTEX) and total petroleum hydrocarbons (TPH) or other potential fresh water contaminants unique to the leak, spill or release. Action levels and sampling and analytical methods for determining contaminant concentrations are described in detail in Sections IV. and V.

**** **(NOTE: Soils contaminated as a result of spills, leaks or releases of non-exempt wastes must be evaluated for all RCRA Subtitle C hazardous waste characteristics. The above definitions apply only to oilfield contaminated soils which are exempt from federal RCRA Subtitle C hazardous waste provisions and nonexempt oilfield contaminated soils which are characteristically nonhazardous according to RCRA Subtitle C regulations. Any nonexempt contaminated soils which are determined to be characteristically hazardous cannot be remediated using this guidance document and will be referred to the New Mexico Environment Department Hazardous Waste Program.)**

C. **GROUND WATER QUALITY**

If ground water is encountered during the soil/waste characterization of the impacted soils, a sample should be obtained to assess the incidents potential impact on ground water quality. Ground water samples should be obtained using the sampling procedures in Section V.C. Monitor wells may be required to assess potential impacts on ground water and the extent of ground water contamination, if there is a reasonable probability of ground water contamination based upon the extent and magnitude of soil contamination defined during remedial activities.

IV. SOIL AND WATER REMEDIATION ACTION LEVELS

A. **SOILS**

The sections below describe the OCD's recommended remediation action levels for soils contaminated with petroleum hydrocarbons. Soils contaminated with substances other than petroleum hydrocarbons may be required to be remediated based upon the nature of the contaminant and it's potential to impact fresh waters, public health and the environment.

1. **Highly Contaminated/Saturated Soils**

All highly contaminated/saturated soils should be remediated insitu or excavated to the maximum extent practicable. These soils should be remediated using techniques described in Section VI.A to the contaminant specific level listed in Section IV.A.2.b.

2. Unsaturated Contaminated Soils

The general site characteristics obtained during the site assessment (Section III.A.) will be used to determine the appropriate soil remediation action levels using a risk based approach. Soils which are contaminated by petroleum constituents will be scored according to the ranking criteria below to determine their relative threat to public health, fresh waters and the environment.

a. Ranking Criteria

Depth To Ground Water	Ranking Score
<50 feet	20
50 - 99	10
>100	0

Wellhead Protection Area

<1000 feet from a water source,or; <200 feet from private domestic water source	
Yes	20
No	0

Distance To Surface Water Body

<200 horizontal feet	20
200 - 1000 horizontal feet	10
>1000 horizontal feet	0

b. Recommended Remediation Action Level

The total ranking score determines the degree of remediation that may be required at any given site. The total ranking score is the sum of all four individual ranking criteria listed in Section IV.A.2.a. The table below lists the remediation action level that may be required for the appropriate total ranking score.

(NOTE: The OCD retains the right to require remediation to more stringent levels than those proposed below if warranted by site specific conditions (ie. native soil type, location relative to population centers and future use of the site or other appropriate site specific conditions.)

	Total Ranking Score		
	>19	10 - 19	0 - 9
Benzene(ppm)*	10	10	10
BTEX(ppm)*	50	50	50
TPH(ppm)**	100	1000	5000

* A field soil vapor headspace measurement (Section V.B.1) of 100 ppm may be substituted for a laboratory analysis of the Benzene and BTEX concentration limits.

** The contaminant concentration for TPH is the concentration above background levels.

B. GROUND WATER

Contaminated ground water is defined as ground water of a present or foreseeable beneficial use which contains free phase products, dissolved phase volatile organic constituents or other dissolved constituents in excess of the natural background water quality. Ground water contaminated in excess of the WQCC ground water standards or natural background water quality will require remediation.

V. SOIL AND WATER SAMPLING PROCEDURES

Below are the sampling procedures for soil and ground water contaminant investigations of leaks, spills or releases of RCRA Subtitle C exempt oil field petroleum hydrocarbon wastes. Leaks, spills or releases of non-exempt RCRA wastes must be tested to demonstrate that the wastes are not characteristically hazardous according to RCRA regulations. Sampling for additional

constituents may be required based upon the nature of the contaminant which was leaked, spilled or released.

A. HIGHLY CONTAMINATED OR SATURATED SOILS

The following method is used to determine if soils are highly contaminated or saturated:

1. Physical Observations

Study a representative sample of the soil for observable free petroleum hydrocarbons or immiscible phases and gross staining. The immiscible phase may range from a free hydrocarbon to a sheen on any associated aqueous phase. A soil exhibiting any of these characteristics is considered highly contaminated or saturated.

B. UNSATURATED CONTAMINATED SOILS

The following methods may be used for determining the magnitude of contamination in unsaturated soils:

1. Soil Sampling Procedures for Headspace Analysis

A headspace analysis may be used to determine the total volatile organic vapor concentrations in soils (ie. in lieu of a laboratory analysis for benzene and BTEX but not in lieu of a TPH analysis). Headspace analysis procedures should be conducted according to OCD approved industry standards or other OCD-approved procedures. Accepted OCD procedures are as follows:

a) Fill a 0.5 liter or larger jar half full of sample and seal the top tightly with aluminum foil or fill a one quart zip-lock bag one-half full of sample and seal the top of the bag leaving the remainder of the bag filled with air.

b) Ensure that the sample temperature is between 15 to 25 degrees Celsius (59-77 degrees Fahrenheit).

c) Allow aromatic hydrocarbon vapors to develop within the headspace of the sample jar or bag for 5 to 10 minutes. During this period, the sample jar should be shaken vigorously for 1 minute or the contents of the bag should be gently massaged to break up soil clods.

d) If using a jar, pierce the aluminum foil seal with the probe of either a PID or FID organic vapor meter (OVM), and then record the highest (peak) measurement. If using a bag, carefully open one end of the bag and insert the probe of the OVM into the bag and re-seal the bag around the probe as much as possible to prevent vapors from escaping. Record the peak measurement. The OVM must be calibrated to assume a benzene response factor.

2. Soil Sampling Procedures For Laboratory Analysis

a. Sampling Procedures

Soil sampling for laboratory analysis should be conducted according to OCD approved industry standards or other OCD-approved procedures. Accepted OCD soil sampling procedures and laboratory analytical methods are as follows:

i) Collect samples in clean, air-tight glass jars supplied by the laboratory which will conduct the analysis or from a reliable laboratory equipment supplier.

ii) Label the samples with a unique code for each sample.

iii) Cool and store samples with cold packs or on ice.

iv) Promptly ship sample to the lab for analysis following chain of custody procedures.

v) All samples must be analyzed within the holding times for the laboratory analytical method specified by EPA.

b. Analytical Methods

All soil samples must be analyzed using EPA methods, or by other OCD approved methods and must be analyzed within the holding time specified by the method. Below are laboratory analytical methods commonly accepted by OCD for analysis of soil samples analyzed for petroleum related constituents. Additional analyses may be required if the substance leaked, spilled or released has been anything other than petroleum based fluids or wastes.

i) Benzene, toluene, ethylbenzene and xylene

- EPA Method 602/8020

ii) Total Petroleum Hydrocarbons

- EPA Method 418.1, or;
- EPA Method Modified 8015

C. GROUND WATER SAMPLING

If an investigation of ground water quality is deemed necessary, it should be conducted according to OCD approved industry standards or other OCD-approved procedures. The following methods are standard OCD accepted methods which

should be used to sample and analyze ground water at RCRA Subtitle C exempt sites (Note: The installation of monitor wells may not be required if the OCD approves of an alternate ground water investigation or sampling technique):

1. **Monitor Well Installation/Location**

   One monitor well should be installed adjacent to and hydrologically down-gradient from the area of the leak, spill or release to determine if protectable fresh water has been impacted by the disposal activities. Additional monitor wells, located up-gradient and down-gradient of the leak, spill or release, may be required to delineate the full extent of ground water contamination if ground water underlying the leak, spill or release has been found to be contaminated.

2. **Monitor Well Construction**

   a) Monitor well construction materials should be:

      i) selected according to industry standards;

      ii) chemically resistant to the contaminants to be monitored; and

      iii) installed without the use of glues/adhesives.

   b) Monitor wells should be constructed according to OCD approved industry standards to prevent migration of contaminants along the well casing. Monitor wells should be constructed with a minimum of fifteen (15) feet of well screen. At least five (5) feet of the well screen should be above the water table to accommodate seasonal fluctuations in the static water table.

3. **Monitor Well Development**

   When ground water is collected for analysis from monitoring wells, the wells should be developed prior to sampling. The objective of monitor well development is to repair damage done to the formation by the drilling operation so that the natural hydraulic properties of the formation are restored and to remove any fluids introduced into the formation that could compromise the integrity of the sample. Monitoring well development is accomplished by purging fluid from the well until the pH and specific conductivity have stabilized and turbidity has been reduced to the greatest extent possible.

4. **Sampling Procedures**

   Ground water should be sampled according to OCD accepted standards or other OCD approved methods. Samples should be collected in clean containers supplied by the laboratory which will conduct the analysis or from a reliable laboratory equipment supplier. Samples for

different analyses require specific types of containers. The laboratory can provide information on the types of containers and preservatives required for sample collection. The following procedures are accepted by OCD as standard sampling procedures:

a) Monitor wells should be purged of a minimum of three well volumes of ground water using a clean bailer prior to sampling to ensure that the sample represents the quality of the ground water in the formation and not stagnant water in the well bore.

b) Collect samples in appropriate sample containers containing the appropriate preservative for the analysis required. No bubbles or headspace should remain in the sample container.

c) Label the sample containers with a unique code for each sample.

d) Cool and store samples with cold packs or on ice.

e) Promptly ship sample to the lab for analysis following chain of custody procedures.

f) All samples must be analyzed within the holding times for the laboratory analytical method specified by EPA.

5. Ground Water Laboratory Analysis

Samples should be analyzed for potential ground water contaminants contained in the waste stream, as defined by the WQCC Regulations. All ground water samples must be analyzed using EPA methods, or by other OCD approved methods and must be analyzed within the holding time specified by the method. Below are OCD accepted laboratory analytical methods for analysis of ground water samples analyzed for petroleum related constituents. Additional analyses may be required if the substance leaked, spilled or release has been anything other than a petroleum based fluid or waste.

a. Analytical Methods

i.) Benzene, Toluene, Ethylbenzene and Xylene

- EPA Method 602/8020

ii.) Major Cations and Anions

- Various EPA or standard methods

iii.) Heavy Metals

- EPA Method 6010, or;
- Various EPA 7000 series methods

iv.) Polynuclear Aromatic Hydrocarbons

- EPA Method 8100

VI. REMEDIATION

The following discussion summarizes recommended techniques for remediation of contaminated soil and ground water as defined in Section IV.A. and IV.B. OCD approval for remediation of an individual leak, spill or release site is not required if the company is operating under an OCD approved spill containment plan. All procedures which deviate from the companies spill containment plan must be approved by OCD.

A. SOIL REMEDIATION

When RCRA Subtitle C exempt or RCRA nonhazardous petroleum contaminated soil requires remediation, it should be remediated and managed according to the criteria described below or by other OCD approved procedures which will remove, treat, or isolate contaminants in order to protect fresh waters, public health and the environment.

In lieu of remediation, OCD may accept an assessment of risk which demonstrates that the remaining contaminants will not pose a threat to present or foreseeable beneficial use of fresh waters, public health and the environment.

1. Contaminated Soils

Highly contaminated/saturated soils and unsaturated contaminated soils exceeding the standards described in Section IV.A. should be either:

a) Excavated from the ground until a representative sample from the walls and bottom of the excavation is below the contaminant specific remediation level listed in Section IV.A.2.b or an alternate approved remediation level, or;

b) Excavated to the maximum depth and horizontal extent practicable. Upon reaching this limit a sample should be taken from the walls and bottom of the excavation to determine the remaining levels of soil contaminants, or;

c) Treated in place, as described in Section VI.A.2.b.ii. - Treatment of Soil in Place, until a representative sample is below the contaminant specific remediation level listed in Section IV.A.2.b, or an alternate approved remediation level, or;

d) Managed according to an approved alternate method.

2. Soil Management Options

All soil management options must be approved by OCD. The following is a list of options for either on-site treatment or off-site treatment and/or disposal of contaminated soils:

a. Disposal

Excavated soils may be disposed of at an off-site OCD approved or permitted facility.

b. Soil Treatment and Remediation Techniques

i. Landfarming

Onetime applications of contaminated soils may be landfarmed on location by spreading the soil in an approximately six inch lift within a bermed area. Only soils which do not contain free liquids can be landfarmed. The soils should be disced regularly to enhance biodegradation of the contaminants. If necessary, upon approval by OCD, moisture and nutrients may be added to the soil to enhance aerobic biodegradation.

In some high risk areas an impermeable liner may be required to prevent leaching of contaminants into the underlying soil.

Landfarming sites that will receive soils from more than one location are considered centralized sites and must be approved separately by the OCD prior to operation.

ii. Insitu Soil Treatment

Insitu treatment may be accomplished using vapor venting, bioremediation or other approved treatment systems.

iii. Alternate Methods

The OCD encourages alternate methods of soil remediation including, but not limited to, active soil aeration, composting, bioremediation, solidification, and thermal treatment.

B. GROUND WATER REMEDIATION

1. Remediation Requirements

Ground water remediation activities will be reviewed and approved by OCD on a case by case basis prior to commencement of remedial activities. When contaminated

ground water exceeds WQCC ground water standards, it should be remediated according to the criteria described below.

a. Free Phase Contamination

Free phase floating product should be removed from ground water through the use of skimming devices, total-fluid type pumps, or other OCD-approved methods.

b. Dissolved Phase Contamination

Ground water contaminated with dissolved phase constituents in excess of WQCC ground water standards can be remediated by either removing and treating the ground water, or treating the ground water in place. If treated waters are to be disposed of onto or below the ground surface, a discharge plan must be submitted and approved by OCD.

c. Alternate Methods

The OCD encourages other methods of ground water remediation including, but not limited to, air sparging and bioremediation. Use of alternate methods must be approved by OCD prior to implementation.

VII. TERMINATION OF REMEDIAL ACTION

Remedial action may be terminated when the criteria described below have been met:

A. SOIL

Contaminated soils requiring remediation should be remediated so that residual contaminant concentrations are below the recommended soil remediation action level for a particular site as specified in Section IV.A.2.b.

If soil action levels cannot practicably be attained, an evaluation of risk may be performed and provided to OCD for approval showing that the remaining contaminants will not pose a threat to present or foreseeable beneficial use of fresh water, public health and the environment.

B. GROUND WATER

A ground water remedial action may be terminated if all recoverable free phase product has been removed, and the concentration of the remaining dissolved phase contaminants in the ground water does not exceed New Mexico WQCC water quality standards or background levels. Termination of remedial action will be approved by OCD upon a demonstration of completion of remediation as described in above.

VIII. FINAL CLOSURE

Upon termination of any required remedial actions (Section VII.) the area of a leak, spill or release may be closed by backfilling any excavated areas, contouring to provide drainage away from the site, revegetating the area or other OCD approved methods.

IX. FINAL REPORT

Upon completion of remedial activities a final report summarizing all actions taken to mitigate environmental damage related to the leak, spill or release will be provided to OCD for approval.

APPENDIX A

AND BLOWOUTS

A. The Division shall be notified of any fire, break, leak, spill, or blowout occurring at any injection or disposal facility or at any oil or gas drilling, producing, transporting, or processing facility in the State of New Mexico by the person operating or controlling such facility.

B. "Facility," for the purpose of this rule, shall include any oil or gas well, any injection or disposal well, and any drilling or workover well; any pipe line through which crude oil, condensate, casinghead or natural gas, or injection or disposal fluid (gaseous or liquid) is gathered, piped, or transported (including field flow-lines and lead-lines but not including natural gas distribution systems); any receiving tank, holding tank, or storage tank, or receiving and storing receptacle into which crude oil, condensate, injection or disposal fluid, or casinghead or natural gas is produced, received, or stored; any injection or disposal pumping or compression station including related equipment; any processing or refining plant in which crude oil, condensate, or casinghead or natural gas is processed or refined; and any tank or drilling pit or slush pit associated with oil or gas well or injection or disposal well drilling operations or any tank, storage pit, or pond associated with oil or gas production or processing operations or with injection or disposal operations and containing hydrocarbons or hydrocarbon waste or residue, salt water, strong caustics or strong acids, or other deleterious chemicals or harmful contaminants.

C. Notification of such fire, break, leak, spill, or blowout shall be in accordance with the provisions set forth below:

(1) Well Blowouts. Notification of well blowouts and/or fires shall be "immediate notification" described below. ("Well blowout" is defined as being loss of control over and subsequent eruption of any drilling or workover well, or the rupture of the casing, casinghead, or wellhead or any oil or gas well or injection or disposal well, whether active or inactive, accompanied by the sudden emission of fluids, gaseous or liquid, from the well.)

(2) "Major" Breaks, Spills, or Leaks. Notification of breaks, spills, or leaks of 25 or more barrels of crude oil or condensate, or 100 barrels or more of salt water, none of which reaches a watercourse or enters a stream or lake; breaks, spills, or leaks in which ten or more barrels of crude oil or condensate or 25 barrels or more of salt water does reach a watercourse or enters a stream or lake; and breaks, spills, or leaks of hydrocarbons or hydrocarbon waste or residue, salt water, strong caustics or strong acids, gases, or other deleterious chemicals or harmful contaminants of any magnitude which may with reasonable probability endanger human health or result in substantial damage to property, shall be "immediate notification" described below.

(3) "Minor" Breaks, Spills, or Leaks. Notification of breaks, spills, or leaks of 5 barrels or more but less than 25 barrels of crude oil or condensate, or 25 barrels or more but less than 100 barrels of salt water, none of which reaches a watercourse or enters a stream or lake, shall be "subsequent notification" described below.

(4) "Gas Leaks and Gas Line Breaks. Notification of gas leaks from any source or of gas pipe line breaks in which natural or casinghead gas of any quantity has escaped or is escaping which may with reasonable probability endanger human health or result in substantial damage to property shall be "immediate notification" described below. Notification of gas pipe line breaks or leaks in which the loss is estimated to be 1000 or more MCF of natural or casinghead gas but in which there is no danger to human health nor of substantial damage to property shall be "subsequent notification" described below.

(5) Tank Fires. Notification of fires in tanks or other receptacles caused by lightning or any other cause, if the loss is, or it appears that the loss will be, 25 or more barrels of crude oil or condensate, or fires which may with reasonable probability endanger human health or result in substantial damage to property, shall be "immediate notification" as described below. If the loss is, or it appears that the loss will be at least 5 barrels but less than 25 barrels, notification shall be "subsequent notification" described below.

(6) Drilling Pits, Slush Pits, and Storage Pits and Ponds. Notification of breaks and spills from any drilling pit, slush pit, or storage pit or pond in which any hydrocarbon or hydrocarbon waste or residue, strong caustic or strong acid, or other deleterious chemical or harmful contaminant endangers human health or does substantial surface damage, or reaches a watercourse or enters a stream or lake in such quantity

(7) IMMEDIATE NOTIFICATION. "Immediate Notification" shall be as soon as possible after discovery and shall be either in person or by telephone to the district office of the Division district in which the incident occurs, or if the incident occurs after normal business hours, to the District Supervisor, the Oil and Gas Inspector, or the Deputy Oil and Gas Inspector. A complete written report ("Subsequent Notification") of the incident shall also be submitted in DUPLICATE to the appropriate district office of the Division within ten days after discovery of the incident.

(8) SUBSEQUENT NOTIFICATION. "Subsequent Notification" shall be a complete written report of the incident and shall be submitted in duplicate to the district office of the Division district in which the incident occurred within ten days after discovery of the incident.

(9) CONTENT OF NOTIFICATION. All reports of fires, breaks, leaks, spills, or blowouts, whether verbal or written, shall identify the location of the incident by quarter-quarter, section, township, and range, and by distance and direction from the nearest town or prominent landmark so that the exact site of the incident can be readily located on the ground. The report shall specify the nature and quantity of the loss and also the general conditions prevailing in the area, including precipitation, temperature, and soil conditions. The report shall also detail the measures that have been taken and are being taken to remedy the situation reported.

(10) WATERCOURSE, for the purpose of this rule, is defined as any lake-bed or gully, draw, stream bed, wash, arroyo, or natural or man-made channel through which water flows or has flowed.

APPENDIX B

1-203. NOTIFICATION OF DISCHARGE--REMOVAL.

A. With respect to any discharge from any facility of oil or other water contaminant, in such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property, the following notifications and corrective actions are required:

1. As soon as possible after learning of such a discharge, but in no event more than twenty-four (24) hours thereafter, any person in charge of the facility shall orally notify the Chief, Ground Water Bureau, Environmental Improvement Division, or his counterpart in any constituent agency delegated responsibility for enforcement of these rules as to any facility subject to such delegation. To the best of that person's knowledge, the following items of information shall be provided:

a. the name, address, and telephone number of the person or persons in charge of the facility, as well as of the owner and/or operator of the facility;

b. the name and address of the facility;

c. the date, time, location, and duration of the discharge;

d. the source and cause of discharge;

e. a description of the discharge, including its chemical composition;

f. the estimated volume of the discharge; and

g. any actions taken to mitigate immediate damage from the discharge.

2. When in doubt as to which agency to notify, the person in charge of the facility shall notify the Chief, Ground Water Bureau, Environmental Improvement Division. If that division does not have authority pursuant to Commission delegation, the division shall notify the appropriate constituent agency.

3. Within one week after the discharger has learned of the discharge, the facility owner and/or operator shall send written notification to the same division official, verifying the prior oral notification as to each of the foregoing items and providing any appropriate additions or corrections to the information contained in the prior oral notification.

4. The oral and written notification and reporting requirements contained in the three preceding paragraphs and the paragraphs below are not intended to be duplicative of discharge notification and reporting requirements promulgated by the Oil Conservation Commission (OCC) or by the Oil Conservation Division (OCD); therefore, any facility which is subject to OCC or OCD discharge notification and reporting requirements need not additionally comply with the nofification/and reporting requirements herein.

5. As soon as possible after learning of such a discharge, the owner/operator of the facility shall take such corrective actions as are necessary or appropriate to contain and remove or mitigate the damage caused by the discharge.

delaying needed corrective actions, the facility owner/operator shall endeavor to contact and consult with the Chief, Ground Water Bureau, Environmental Improvement Division or appropriate counterpart in a delegated agent, in an effort to determine the division's views as to what further corrective actions may be necessary or appropriate to the discharge in question. In any event, no later than fifteen (15) days after the discharger learns of the discharge, the facility owner/operator shall send to said Bureau Chief a written report describing any corrective actions taken and/or to be taken relative to the discharge. Upon a written request and for good cause shown, the Bureau Chief may extend the time limit beyond fifteen (15) days.

7. The Bureau Chief shall approve or disapprove in writing the foregoing corrective action report within thirty (30) days of its receipt by the division. In the event that the report is not satisfactory to the division, the Bureau Chief shall specify in writing to the facility owner/operator any shortcomings in the report or in the corrective actions already taken or proposed to be taken relative to the discharge, and shall give the facility owner/operator a reasonable and clearly specified time within which to submit a modified corrective action report. The Bureau Chief shall approve or disapprove in writing the modified corrective action report within fifteen (15) days of its receipt by the division.

8. In the event that the modified corrective action report also is unsatisfactory to the division, the facility owner/operator has five (5) days from the notification by the Bureau Chief that it is unsatisfactory to appeal to the division director. The division director shall approve or disapprove the modified corrective action report within five (5) days of receipt of the appeal from the Bureau Chief's decision. In the absence of either corrective action consistent with the approved corrective action report or with the decision of the director concerning the shortcomings of the modified corrective action report, the division may take whatever enforcement or legal action it deems necessary or appropriate.

B. Exempt from the requirements of this section are continuous or periodic discharges which are made;

1. in conformance with water quality control commission regulations and rules, regulations or orders of other state or federal agencies; or

2. in violation of water quality control commission regulations but pursuant to an assurance of discontinuance or schedule of compliance approved by the commission or one of its duly authorized constituent agencies.

C. As used in this section:

1. "discharge" means spilling, leaking, pumping, pouring, emitting, emptying, or dumping into water or in a location and manner where there is a reasonable probability that the discharged substance will reach surface or subsurface water;

2. "facility" means any structure, installation, operation, storage tank, transmission line, motor vehicle, rolling stock, or activity of any kind, whether stationary or mobile;

3. "oil" means oil of any kind or in any form including petroleum, fuel oil, sludge, oil refuse and oil mixed with wastes;

4. "operator" means the person or persons responsible for the overall operations of a facility; and

5. "owner" means the person or persons who own a facility, or part of a facility.

D. Notification of discharge received pursuant to this regulation or information obtained by the exploitation of such notification shall not be used against any such person in any criminal case, except for perjury or for giving a false statement.

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

March 30, 2006

Mr. Charles H. Toups
Coastal Chemical Company, LLC
1130 Madison Lane
Farmington, NM 87401

Re: Discharge Permit GW-222
Coastal Chemical Co. Farmington Facility

Dear Mr. Toups:

Pursuant to Water Quality Control Commission (WQCC) Regulations 20.6.2.3104 - 20.6.2.3114 NMAC, the Oil Conservation Division (OCD) hereby approves the discharge permit for the Coastal Chemical Co. (owner/operator) Farmington Facility GW-222 located in the NE/4 NE/4 of Section 24, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico, under the conditions specified in the enclosed **Attachment To The Discharge Permit**. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division Santa Fe Office within 30 working days of receipt of this letter including permit fees.**

Please be advised that approval of this permit does not relieve the owner/operator of responsibility should operations result in pollution of surface water, ground water or the environment. Nor does approval of the permit relieve the owner/operator of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If you have any questions, please contact Ed Martin of my staff at (505-476-3491) or ed.martin@state.nm.us. On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge permit review.

Sincerely,

Wayne Price
Environmental Bureau Chief

Copy: OCD District Office

ATTACHMENT TO THE DISCHARGE PERMIT
COASTAL CHEMICAL CO. FARMINGTON FACILITY (GW-222)
DISCHARGE PERMIT APPROVAL CONDITIONS
March 30, 2006

Please remit a check for $1700.00 made payable to Water Quality Management Fund:

Water Quality Management Fund
c/o: Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, New Mexico 87505

1. **Payment of Discharge Plan Fees:** All discharge permits are subject to WQCC Regulations. Every billable facility that submits a discharge permit application will be assessed a filing fee of $100. The OCD acknowledges receipt of the filing fee. There is also a renewal flat fee of $1,700 for oilfield service companies (*see* WQCC Regulation 20.6.2.3114 NMAC).
2. **Permit Expiration and Renewal:** Pursuant to WQCC Regulation 20.6.2.3109.H.4 NMAC, this permit is valid for a period of five years. **This permit will expire on October 11, 2010** and an application for renewal should be submitted no later than 120 days before that expiration date. Pursuant to WQCC Regulation 20.6.2.3106.F NMAC, if an owner/operator submits a discharge permit renewal application at least 120 days before the discharge permit expires and is in compliance with the approved permit, then the existing discharge permit will not expire until the application for renewal has been approved or disapproved.
3. **Permit Terms and Conditions:** Pursuant to WQCC Regulation 20.6.2.3104 NMAC, when a permit has been issued, the owner/operator must ensure that all discharges shall be consistent with the terms and conditions of the permit. In addition, all facilities shall abide by the applicable rules and regulations administered by the OCD pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-1 through 70-2-38.
4. **Owner/Operator Commitments:** The owner/operator shall abide by all commitments submitted in its October 31, 2005 discharge permit renewal application, including attachments and subsequent amendments and these conditions for approval. Permit applications that reference previously approved plans on file with the division shall be incorporated in this permit and the owner/operator shall abide by all previous commitments of such plans and these conditions for approval.
5. **Modifications:** WQCC Regulation 20.6.2.3109.G NMAC addresses possible future modifications of a permit. Pursuant to WQCC Regulation 20.6.2.3107.C NMAC, the owner/operator shall notify the OCD of any facility expansion, production increase or process modification that would result in any significant modification in the discharge of water contaminants. Pursuant to WQCC Regulation 20.6.2.3109.E NMAC, the Division Director may require a permit modification if any water quality standard specified at 20.6.2.3103 NMAC is being or will be exceeded, or if a toxic pollutant as defined in WQCC Regulation 20.6.2.7 NMAC is present in ground water at any place of withdrawal for present or reasonably foreseeable future use, or that the Water Quality Standards for Interstate and Intrastate streams as specified in 20.6.4 NMAC are being or may be violated in surface water in New Mexico.
6. **Waste Disposal and Storage:** The owner/operator shall dispose of all wastes at an OCD-approved facility. Only oil field RCRA-exempt wastes may be disposed of by injection in a Class II well.

RCRA non-hazardous, non-exempt oil field wastes may be disposed of at an OCD-approved facility upon proper waste determination pursuant to 40 CFR part 261. Any waste stream that is not listed in the discharge permit application must be approved by the OCD on a case-by-case basis.

A. **OCD Rule 712 Waste:** Pursuant to OCD Rule 712 (19.15.9.712 NMAC) disposal of certain non-domestic waste without notification to the OCD is allowed at NMED-permitted solid waste facilities if the waste stream has been identified in the discharge permit and existing process knowledge of the waste stream does not change.

B. **Waste Storage:** The owner/operator shall store all waste in an impermeable bermed area. Waste generated during emergency response operations may be stored for up to 72 hours. All waste storage areas shall be identified in the discharge permit application. Any waste storage area not identified in the permit shall be approved on a case-by-case basis only. The owner/operator shall not store oil field waste on-site for more than 180 days unless approved by the OCD.

7. Drum Storage: The owner/operator must store all drums, including empty drums, containing materials other than fresh water on an impermeable pad with curbing. The owner/operator must store empty drums on their sides with the bungs in place and lined up on a horizontal plane. The owner/operator must store chemicals in other containers, such as tote tanks, sacks, or buckets on an impermeable pad with curbing.

8. Process, Maintenance and Yard Areas: The owner/operator shall either pave and curb or have some type of spill collection device incorporated into the design at all process, maintenance, and yard areas which show evidence that water contaminants from releases, leaks and spills have reached the ground surface.

9. Above Ground Tanks: The owner/operator shall ensure that all above ground tanks have impermeable secondary containment (e.g., liners and berms), which will contain a volume of at least one-third greater than the total volume of the largest tank or all interconnected tanks. The owner/operator shall retrofit all existing tanks before discharge permit renewal. Tanks that contain fresh water or fluids that are gases at atmospheric temperature and pressure are exempt from this condition.

10. Labeling: The owner/operator shall clearly label all tanks, drums, and containers to identify their contents and other emergency notification information. The owner/operator may use a tank code numbering system, which is incorporated into their emergency response plans.

11. Below-Grade Tanks/Sumps and Pits/Ponds.

A. All below-grade tanks and sumps must be approved by the OCD prior to installation and must incorporate secondary containment with leak detection into the design. The owner/operator shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal. All existing below-grade tanks and sumps without secondary containment and leak detection must be tested annually or as specified herein. Systems that have secondary containment with leak detection shall have a monthly inspection of the leak detection system to determine if the primary containment is leaking. Small sumps or depressions in secondary containment systems used to facilitate fluid removal are exempt from these requirements if fluids are removed within 72 hours.

B. All pits and ponds, including modifications and retrofits, shall be designed by a certified registered professional engineer and approved by the OCD prior to installation. In general, all pits or ponds shall have approved hydrologic and geologic reports, location, foundation, liners, secondary containment with leak detection, monitoring and closure plans. All pits or ponds shall be designed, constructed and operated so as to contain liquids and solids in a manner that will protect fresh water, public health, safety and the environment for the foreseeable future. The owner/operator shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal.

C. The owner/operator shall ensure that all exposed pits, including lined pits and open top tanks (8 feet in diameter or larger) shall be fenced, screened, netted, or otherwise rendered non-hazardous to wildlife, including migratory birds.

D. The owner/operator shall maintain the results of tests and inspections at the facility covered by this discharge permit and available for OCD inspection. The owner/operator shall report the discovery of any system which is found to be leaking or has lost integrity to the OCD within 15 days. The owner/operator may propose various methods for testing such as pressure testing to 3 pounds per square inch greater than normal operating pressure and/or visual inspection of cleaned tanks and/or sumps, or other OCD-approved methods. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

12. Underground Process/Wastewater Lines:

A. The owner/operator shall test all underground process/wastewater pipelines at least once every five (5) years to demonstrate their mechanical integrity, except lines containing fresh water or fluids that are gases at atmospheric temperature and pressure. Pressure rated pipe shall be tested by pressuring up to one and one-half times the normal operating pressure, if possible, or for atmospheric drain systems, to 3 pounds per square inch greater than normal operating pressure, and pressure held for a minimum of 30 minutes with no more than a 1% loss/gain in pressure. The owner/operator may use other methods for testing if approved by the OCD.

B. The owner/operator shall maintain underground process and wastewater pipeline schematic diagrams or plans showing all drains, vents, risers, valves, underground piping, pipe type, rating, size, and approximate location. All new underground piping must be approved by the OCD prior to installation. The owner/operator shall report any leaks or loss of integrity to the OCD within 15 days of discovery. The owner/operator shall maintain the results of all tests at the facility covered by this discharge permit and they shall be available for OCD inspection. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

13. Class V Wells: The owner/operator shall close all Class V wells (e.g., septic systems, leach fields, dry wells, etc.) that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes unless it can be demonstrated that ground water will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD-regulated facilities that inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only, must be permitted by the New Mexico Environment Department (NMED).

14. Housekeeping: The owner/operator shall inspect all systems designed for spill collection/prevention and leak detection at least monthly to ensure proper operation and to prevent over topping or system failure. All spill collection and/or secondary containment devices shall be emptied of fluids within 72 hours of discovery. The owner/operator shall maintain all records at the facility and available for OCD inspection.

15. Spill Reporting: The owner/operator shall report all unauthorized discharges, spills, leaks and releases and conduct corrective action pursuant to WQCC Regulation 20.5.12.1203 NMAC and OCD Rule 116 (19.15.3.116 NMAC). The owner/operator shall notify both the OCD District Office and the Santa Fe Office within 24 hours and file a written report within 15 days.

16. OCD Inspections: The OCD may place additional requirements on the facility and modify the permit conditions based on OCD inspections.

17. Storm Water: The owner/operator shall implement and maintain run-on and runoff plans and controls. The owner/operator shall not discharge any water contaminant that exceeds the WQCC standards specified in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and

Intrastate Streams) including any oil sheen in any storm water run-off. The owner/operator shall notify the OCD within 24 hours of discovery of any releases and shall take immediate corrective action(s) to stop the discharge.

18. Unauthorized Discharges: The owner/operator shall not allow or cause water pollution, discharge or release of any water contaminant that exceeds the WQCC standards listed in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) unless specifically listed in the permit application and approved herein. **An unauthorized discharge is a violation of this permit.**

19. Vadose Zone and Water Pollution: The owner/operator shall address any contamination through the discharge permit process or pursuant to WQCC 20.6.2.4000-.4116 NMAC (Prevention and Abatement of Water Pollution). The OCD may require the owner/operator to modify its permit for investigation, remediation, abatement, and monitoring requirements for any vadose zone or water pollution. Failure to perform any required investigation, remediation, or abatement and submit subsequent reports will be a violation of the permit.

20. Additional Site Specific Conditions: N/A

21. Transfer of Discharge Permit: The owner/operator shall notify the OCD prior to any transfer of ownership, control or possession of a facility with an approved discharge permit. The purchaser shall submit a written commitment to comply with the terms and conditions of the previously approved discharge permit and shall seek OCD approval prior to transfer.

22. Closure: The owner/operator shall notify the OCD when operations of the facility are to be discontinued for a period in excess of six months. Prior to closure of the facility, the operator shall submit a closure plan for approval. Closure and waste disposal shall be in accordance with the statutes, rules and regulations in effect at the time of closure.

23. Certification: Certification: COASTAL CHEMICAL CO. LLC, by the officer whose signature appears below, accepts this permit and agrees to comply with all submitted commitments, including these terms and conditions contained herein**. COASTAL CHEMICAL CO. LLC** further acknowledges that the OCD may, for good cause shown, as necessary to protect fresh water, public health, safety, and the environment, change the conditions and requirements of this permit administratively. Conditions accepted by:

COASTAL CHEMICAL CO. LLC

Charles H. Toups CHMM
Company Representative- print name

Company Representative- signature

Director, Quality & Compliance
Title

4-19-06
Date

Coastal Chemical Co., L.L.C.

2006 APR 24 PM 12 36

April 19, 2006

New Mexico Environmental Division
Water Quality Management Fund
c/o Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505
Attn: Mr. Ed Martin

Re: Discharge Plan Renewal
GW-222

Dear Mr. Martin:

Please find attached the signed Discharge Plan Permit Renewal by Coastal Chemical Co., on behalf of the Farmington, New Mexico facility. I have also enclosed a check in the amount of $1,700.00, as requested.

Should you have any questions, please do not hesitate to call me at (337) 261-0796.

Sincerely,

Charles H. Toups, CHMM
Director of Quality and Compliance

Enclosures

P. O. Box 81577 - Lafayette, La. 70598 - Phone: 337.261.0796 Fax: 337.261.0797

ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

I hereby acknowledge receipt of check No. [redacted] dated 4/18/06

or cash received on _____ in the amount of $ 1700 00

from Coastal Chemical Co.

for GW-222

Submitted by: Lauryne Romero Date: 5/1/06

Submitted to ASD by: Lauryne Romero Date: 5/1/06

Received in ASD by: _____ Date: _____

Filing Fee _____ New Facility _____ Renewal ✓

Modification _____ Other _____

Organization Code 521.07 Applicable FY 2004

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

COASTAL CHEMICAL CO., L.L.C.
P. O. BOX 820, ABBEVILLE, LOUISIANA 70511-0820

LASALLE BANK N.A.
CHICAGO, ILLINOIS 60661

[redacted]

70-2302
719

CHECK NO	VENDOR NO	DATE	PAY THIS AMOUNT
67953	23432501	4/18/ 6	$****1,700.00

ONE THOUSAND SEVEN HUNDRED & 00/100 DOLLARS

PAY TO THE ORDER OF

WATER QUALITY MANAGEMENT FUND
NEW MEXICO OIL CONSERVATION
1220 S ST FRANCIS DRIVE
SANTE FE NM, 87505

COASTAL CHEMICAL CO., L.L.C.

Doloris Cabrol

AUTHORIZED SIGNATURES

[redacted]

Coastal Chemical Co., L.L.C.

Coastal Chemical Co., L.L.C.

Farmington, New Mexico Facility

San Juan County

Discharge Plan Renewal

Discharge Plan GW – 222

Renewal Submitted January 20, 2006

P. O. Box 81577 - Lafayette, La. 70598 - Phone: 337.261.0796 Fax: 337.261.0797

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Revised June 10, 2003

Submit Original
Plus 1 Copy
to Santa Fe
1 Copy to Appropriate
District Office

DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES,GAS PLANTS, REFINERIES, COMPRESSOR, GEOTHERMAL FACILITES AND CRUDE OIL PUMP STATIONS

(Refer to the OCD Guidelines for assistance in completing the application)

☐ New ☒ Renewal ☐ Modification

1. Type: Chemical & Lubricant Distribution
2. Operator: Coastal Chemical CO., L.L.C.
   Address: 1130 Madison Lane, Farmington, NM 87401
   Contact Person: Charles H Toups Phone: 337-261-0796
3. Location: NE 1/4 NE 1/4 Section 24 Township 29N Range 12W
   Submit large scale topographic map showing exact location.

4. Attach the name, telephone number and address of the landowner of the facility site.
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.
6. Attach a description of all materials stored or used at the facility.
7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.
8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.
9. Attach a description of proposed modifications to existing collection/treatment/disposal systems.
10. Attach a routine inspection and maintenance plan to ensure permit compliance.
11. Attach a contingency plan for reporting and clean-up of spills or releases.
12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.
13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.

14. CERTIFICATIONI hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Charles H. Toups Title: Director of Quality & Compliance

Signature: [signature] Date: 1-20-06

E-mail Address: ctoups@brenntagww.com

#4

Coastal Chemical Co., L.L.C.

Farmington Facility Owner Information

Averett, Dimmick & Hagen
Chuck Hagen, Agent
650 W. Main Street
Farmington, New Mexico 87402
505-325-8863

#5

Area A - Above Ground Bulk Storage (West Tank Farm)

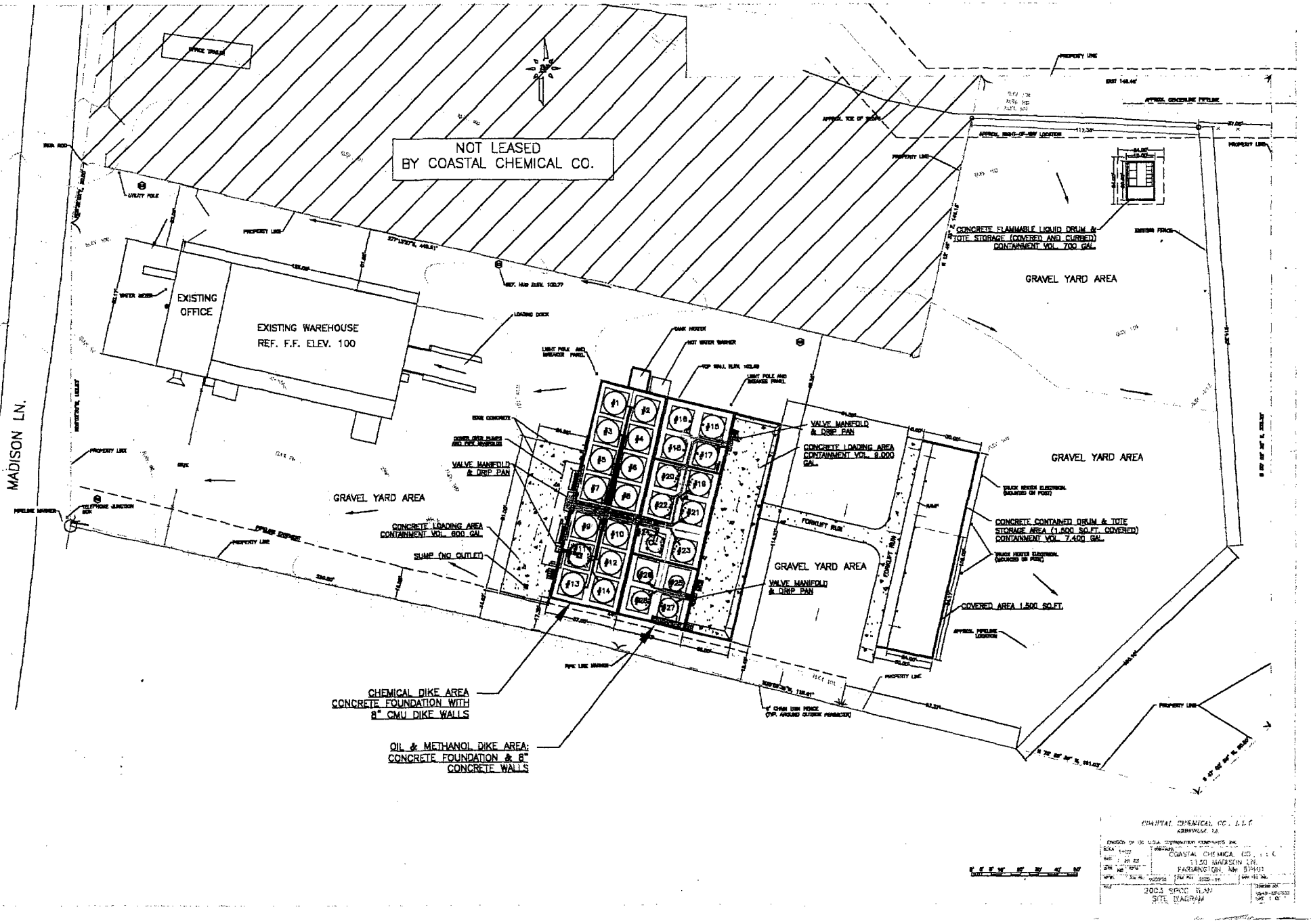
Tank Designation	Product	Quantity (gal)	Contain-ment	Major Failure Event	Maximum Discharge Rate (gpm)
Storage Tank 1	Triethylene Glycol	16,919	Diked	Tank Rupture	250
Storage Tank 2	Dea 85%	16,919	Diked	Tank Rupture	250
Storage Tank 3	Triethylene Glycol	16,919	Diked	Tank Rupture	250
Storage Tank 4	Triethylene Glycol	16,919	Diked	Tank Rupture	250
Storage Tank 5	Gas Spec CS + Solvent	16,919	Diked	Tank Rupture	250
Storage Tank 6	Gas Spec SS Solvent	16,919	Diked	Tank Rupture	250
Storage Tank 7	Sulferox IC -210	12,690	Diked	Tank Rupture	250
Storage Tank 8	Sulferox IC -110	12,690	Diked	Tank Rupture	250
Storage Tank 9	Coastal Guard 50%	12,690	Diked	Tank Rupture	250
Storage Tank 10	Gas Spec CS+ Additive	8,225	Diked	Tank Rupture	250
Storage Tank 11	Gas Spec Blend Tank	12,690	Diked	Tank Rupture	250
Storage Tank 12	Wash Water	8,225	Diked	Tank Rupture	250
Storage Tank 13	Reprocessed Triethylene Glycol	12,690	Diked	Tank Rupture	250
Storage Tank 14	Gas Spec 2000 Additive	12,690	Diked	Tank Rupture	250
Loading/ Unloading Manifold		300	Diked	Line Rupture	20

Area B - Above Ground Bulk Storage (East Tank Farm)

Tank Designation	Product	Quantity (gal)	Containment	Major Failure Event	Maximum Discharge Rate (gpm)
Storage Tank 15	Mobil Pegasus 805	12,690	Diked	Tank Rupture	250
Storage Tank 16	Conoco 3000-30	12,690	Diked	Tank Rupture	250
Storage Tank 17	Summit NGP-150	12,690	Diked	Tank Rupture	250
Storage Tank 18	Mobil Pegasus Special	12,690	Diked	Tank Rupture	250
Storage Tank 19	Ethylene Glycol	12,690	Diked	Tank Rupture	250
Storage Tank 20	Mobil Pegasus 805	16,919	Diked	Tank Rupture	250
Storage Tank 21	Mobil Pegasus 805 Super	16,919	Diked	Tank Rupture	250
Storage Tank 22	Conoco Geo 15w40	16,919	Diked	Tank Rupture	250
Storage Tank 23	Mobil Pegasus 505	16,919	Diked	Tank Rupture	250
Storage Tank 24	Coastal Guard 50%	7,614	Diked	Tank Rupture	250
Loading/ Unloading Manifold		300	Diked	Line Rupture	20

Area C - Above Ground Bulk Storage (East Tank Farm)

Tank Designation	Product	Quantity (gal)	Containment	Major Failure Event	Maximum Discharge Rate (gpm)
Storage Tank 25	Methanol	8,272	Diked	Tank Rupture	250
Storage Tank 26	Methanol	8,272	Diked	Tank Rupture	250
Storage Tank 27	Methanol	11,750	Diked	Tank Rupture	250
Storage Tank 28	Methanol	11,750	Diked	Tank Rupture	250
Loading/ Unloading		300	Diked	Line Rupture	20


NOT LEASED
BY COASTAL CHEMICAL CO.
MADISON LN.
EXISTING OFFICE
EXISTING WAREHOUSE
REF. F.F. ELEV. 100
GRAVEL YARD AREA
GRAVEL YARD AREA
GRAVEL YARD AREA
GRAVEL YARD AREA
CONCRETE FLAMMABLE LIQUID DRUM & TOTE STORAGE (COVERED AND CURBED) CONTAINMENT VOL. 700 GAL.
VALVE MANIFOLD & DRIP PAN
CONCRETE LOADING AREA CONTAINMENT VOL. 9,000 GAL.
VALVE MANIFOLD & DRIP PAN
CONCRETE LOADING AREA CONTAINMENT VOL. 600 GAL.
SUMP (NO OUTLET)
VALVE MANIFOLD & DRIP PAN
CONCRETE CONTAINED DRUM & TOTE STORAGE AREA (1,500 SQ.FT. COVERED) CONTAINMENT VOL. 7,400 GAL.
COVERED AREA 1,500 SQ.FT.
CHEMICAL DIKE AREA CONCRETE FOUNDATION WITH 8" CMU DIKE WALLS
OIL & METHANOL DIKE AREA: CONCRETE FOUNDATION & 8" CONCRETE WALLS
COASTAL CHEMICAL CO., L.L.C.
1130 MADISON LN.
FARMINGTON, NM 87401
2003 SPCC PLAN
SITE DIAGRAM

#6

#7

Coastal Chemical Co., L.L.C.

Farmington Facility Information

Rinse Water from pump, hoses and tanks used to deliver virgin chemical. All chemicals rinsed out are virgin, unused chemicals. Chemicals may include: Alkanolamine, Glycol (TEG & EG) antifreeze.

Average Amount – 1,683 gallons per year or 4.6 gallons per day

P. O. Box 81577 - Lafayette, La. 70598 - Phone: 337.261.0796 Fax: 337.261.0797

Waste Management	Section VI.A.	Procedure 1
p.1 of 1	Effective: May 31, 1994 Supersedes: New	Empty Drum Management

#8
#10

Empty Drum Management

Policy: It is Coastal's policy that all self-generated waste and empty containers are disposed of in a responsible manner, in compliance with all local, state and federal regulations.

Responsible Distribution Code: VI. A.

ISO 9000 Standard:
4.13 Control of Non-Conforming Product
4.13.1 Non- Conformity Review & Disposition
4.16 Quality Record

Empty drums that previously contained a lading and have not been reconditioned are considered a non-conforming product. The following procedures are used to prevent the improper disposal or inadvertent reuse of these containers.

1. Empty drums (steel or poly) are only scheduled for pick up from customers when the following administrative conditions are met:
- customer requests it
- drum had been supplied by Coastal and
- Coastal drum supplier or a drum recodntioner will take back empty drum.

2. Empty drums are only picked up from customers when all of the following physical conditions are met. Through inspection, the Coastal driver makes the determination of condition and has authority to reject individual containers from pick-up.
- drum is empty; no more than 1" of residue remains in the container
- all bungs, gaskets are in place (can be replaced by driver) and tight
- drum has a label showing "last contained" product
- drum appears to have strutural integrity (i.e. not rusted out, no punctures, etc.).

3. The Facility Manager has responsibility for empty drum management:
- if drums are returnable to supplier, supplier is notified of quantity and approval to hold drums for next supplier delivery, or ship via common carrier are made
- empty drums which previously contained a hazardous material can only be shipped on common or contract carrier when a bill of lading is prepared in accordance with 49 CFR. This bill of lading (delivery ticket) is a Quality Record.

Other Self-Generated Waste Management

Policy: It is Coastal's policy that all self-generated waste and empty containers are disposed of in a responsible manner, in compliance with all local, state and federal regulations.

Responsible Distribution Code: VI. A.

ISO 9000 Standard:
4.13 Control of Non-Conforming Product
4.13.1 Non- Conformity Review & Disposition
4.16 Quality Record

1. See procedures in Section VI.B.

Waste Reduction: Bulk Transfers

Policy: Coastal's policy encourages waste reduction programs or procedures, by first trying source reduction, second to recycle/reuse, third to treatment and fourth to disposal.

Responsible Distribution Code: VI. B.

ISO 9000 Standard:
4.13 Control of Non-Conforming Product
4.13.1 Non- Conformity Review & Disposition

Spills, leaks and ruptures produce materials that if improperly managed result in waste, a non-conforming product. The following procedures are used to reduce the production of waste in bulk transfer operations.

1. Gaskets, hoses and pumps are maintained to reduce the production of leaks, drips and ruptures.

2. Pails are used at all truck connections, so that any drips recovered can be emptied into the appropriate truck compartment or bulk tank. Pails will be covered when not in use.

3. Following a bulk product transfer, hoses are walked to the tank or container in order to drain as much product as feasible and reduce putting residue into a drip pan or trough.

4. Cap or plug transfer hoses and return to proper storage.

5. Facility Managers will consider installation of a nitrogen flushing system to reduce line residues.

6. Employees are continually observing for leaks, ruptures, spills and have authority to shut down a transfer operation when operating problems are observed.

7. In tanker shipments and when logistically feasible, compatible products are shipped before incompatibles (see Section IV.A. 1, Compatibility Categories) to reduce the number of wash-outs needed.

Waste Reduction: Damaged Freight

Policy: Coastal's policy encourages waste reduction programs or procedures, by first trying source reduction, second to recycle/reuse, third to treatment and fourth to disposal.

Responsible Distribution Code: VI. B.

ISO 9000 Standard:
4.13 Control of Non-Conforming Product
4.13.1 Non- Conformity Review & Disposition
4.16 Quality Record

Damaged freight produces non-conforming product. The following procedures are used to manage damaged freight at warehouse receiving locations and ensure they do not become a waste for Coastal.

1. The Facility Manager, in cooperation with freight carriers Insurance Department, has responsibility for managing damaged freight.

2. If a carrier arrives at a warehouse receiving location with damaged freight, determine whether the shipment is a hazardous material or a non-hazardous material.

3. Damaged Hazardous Materials Freight
- refuse to accept damaged product in shipment
- do not make the carrier leave the receiving area with a damaged package
- provide emergency response as required
- weigh package to find out amount of product lost
- note amount and type of damage on carrier's and shipper's bills of lading
- contact carrier and file a freight claim , ensuring the carrier assumes responsibility for disposition of the damaged product, including costs for managing as hazardous waste. This freight claim is a Quality Record.
- permit the carrier to temporarily "store" the materials per 49 CFR 177.853 (b) until arrangements are made for proper overpack and return to the shipper or repackaging for resale.
- if the carrier has not removed the material within 30 days of the incident, follow-up with the carrier every 30 days until it is removed.

4. Damaged Non- Hazardous Materials Freight
- decide whether to refuse or accept shipment
- carrier can be asked to leave the receiving area with a damaged package
- provide emergency response as required
- if damaged material is accepted, repair or repackage the material
- weigh package to find out amount of product lost.
- note amount and type of damage on carrier's and shipper's bill of lading.
- contact carrier and file a freight claim for costs associated with repair/repackaging. This freight claim is a Quality Record.

Waste Recycling/Reuse

Policy: Coastal's policy encourages waste reduction programs or procedures, by first trying source reduction, second to recycling/reuse, third to treatment and fourth to disposal.

Responsible Distribution Code: VI. B.

ISO 9000 Standard:
4.13 Control of Non-Conforming Product
4.13.1 Non- Conformity Review & Disposition

Waste is considered a non-conforming product. The following procedures are used to minimize waste production through implementation of a recycling alternative.

1. By utlizing the ARU,GDU or other recyling facilities.

2. In some facilities, residue anti-freeze can be used in the bulk tank farm heating system.

3. Retained samples are managed in accordance with Sections IV.F.1 and VI.5.

4. Damaged dry products are repackaged for sale and use per the decision of the Facility Manager.

Waste Disposal

Policy: Coastal's policy encourages waste reduction programs or procedures, by first trying source reduction, second to recycle/reuse, third to treatment and fourth to disposal.

Responsible Distribution Code: VI. B.

ISO 9000 Standard:
4.13 Control of Non-Conforming Product
4.13.1 Non- Conformity Review & Disposition
4.16 Quality Record

Waste is considered a non-conforming product. In certain cases waste minimization, recycling/reuse, and treatment are not sufficient to eliminate waste and waste is created for disposal. The Facility Manager, in cooperation with the Director of Government Regulations, has responsibility for disposing of waste.

Chemical Waste Disposal

1. Chemical products are analyzed in accordance with 40 CFR§ 261 Subparts B, C and D and appropriate State equivalent systems to determine whether they are hazardous waste or can be managed as non-hazardous chemical waste. Waste profiles prepared to support this analysis are a Quality Record.
2. If a chemical product has been determined to be a hazardous waste it is:
- managed in accordance with 40 CFR§ 262 and appropriate State equivalent systems
- not retained on-site for more than 90 days after the determination of its hazardous characteristics
- disposed of at facilities permitted for the waste stream in accordance with 40 CFR§ 266 and appropriate State equivalent systems. The Director of Government Regulation is consulted in selecting a disposal facility.
- Uniform Hazardous Waste Manifests and Restricted Waste Notification Statements are Quality Records for these waste streams.
- annual reports for these waste streams are filed by the Director of Government Regulations. The exception is Abbeville where the report is filed by the Facility Manager and Materials Manager. These annual reports are Quality Records.

3. If a chemical product has been determined to be a non-hazardous waste it is:
- labeled and packaged as a non-hazardous waste
- disposed of at facilities permitted for the waste stream. The Director of Government Regulation is consulted in selecting a disposal facility.
- if shipped under a Uniform Hazardous Waste Manifest, the manifest is a Quality Record for the waste streams. In some cases the Quality Record is the shipping paper or other bill of lading (delivery ticket).

Non-Chemical Waste Disposal

1. Other non-chemical waste disposal is handled by contract with a local garbage disposal service. Invoices are the Quality Record.

Sample Disposal

Policy: Coastal Chemical Company will document current operating procedures for each facility.

Responsible Distribution Code: VI.B.
ISO 9000 Standard:
4.8 Product Identification and Traceability
4.15.1 General Documented Procedures
4.16 Quality Record

1. Samples of virgin product, including sales samples, are returned to their respective bulk tanks, following the same personal protective equipment requirements for bulk receiving.

2. The used sample containers are washed with the appropriate cleaning solution, stored in open top drums and sent to a solid waste landfill. The used cleaning solution is added to the waste tank. The open tops with the old sample containers are managed as hazardous waste.

3. Return samples of TEG (Triethylene Glycol) from the Services Group to their waste reprocessed tanks. Services Group sample containers are managed per step 2.

4. Waste glycols are put in their waste tank for proper disposal.

#10

COASTAL CHEMICAL QUALITY SYSTEM PROCEDURE MANUAL

Compliance Operations

Monthly Safety Environmental & Quality Inspection

Documwnt No: COF105-01
Date of Origin: Jan. 1, 2003

Current Date of Issue: **Jan. 1, 2005**

Facility Location:_____ **Inspection Date:**_____

INSTRUCTIONS: Check or complete as appropriate. Checking NI requires completion of Action Date, Responsible Party at time of inspection. Complete Date Resolved after the action item has been corrected.

NA= not applicable, or none observed during inspection OK=Acceptable NI=Needs Improvement

Safety/Environmental & Quality Item	NA	OK	NI	Action Date	Responsible Party	Date Resolved	If NI, Identify by Zone A-E	Other Comments
OFFICE								
1. General Housekeeping: work areas uncluttered and clear for emergency egress								
2. Slip, trip, fall hazards eliminated								
3. Rubbish containers emptied								
4. Night/security lighting & timers functional								
5. Employees use proper lifting techniques								
6. Electrical Outlet Integrity/ Unblocked								
7. Extension cords/ portable power tools in good condition								
8. Perimeter locks on building entrances in place/work								
9. Visitor control in place/used								
10. Intrusion alarms tested, if applicable								
11. Smoke detector tested								
12. Retain samples managed								
13. Running, horseplay, unsafe work habits avoided								
14. Exit doors marked/ egress unlocked during business hours								

NA= not applicable, or none observed during inspection OK=Acceptable NI=Needs Improvement

Safety/Environmental & Quality Item	NA	OK	NI	Action Date	Responsible Party	Date Resolved	If NI, Identify by Zone A-E	Other Comments
15. Non- exit doors so marked								
16. Emergency Phone Numbers prominently posted								
17. Diagram of fire extinguishers/emergency equipment prominently posted								
18. Fire Extinguishers (10/20# A/B/C): accessible (75' in office), tagged, inspected								
WAREHOUSE (building or zone):								
19. General Housekeeping: work areas uncluttered and clear for emergency egress								
20. Slip, trip, fall hazards eliminated								
21. Rubbish containers emptied								
22. Night/security lighting & timers functional								
23. Electrical Outlet Integrity/ Unblocked								
24. Extension cords/ portable power tools in good condition								
25. Employees use proper lifting techniques								
26. Perimeter locks on building entrances in place/work								
27. Visitor control in place/used								
28. Intrusion alarms tested, applicable								
29. Fire alarms tested								
30. Running, horseplay, unsafe work habits avoided								
31. Exit doors marked/ egress unlocked during business hours								

NA= not applicable, or none observed during inspection OK=Acceptable NI=Needs Improvement

Safety/Environmental & Quality Item	NA	OK	NI	Action Date	Responsible Party	Date Resolved	If NI, Identify by Zone A-E	Other Comments
32. Non- exit doors so marked								
33. Emergency Phone Numbers prominently posted								
34. Diagram of fire extinguishers/emergency equipment prominently posted								
35. Fire Extinguishers (10/20# A/B/C): accessible (50' in warehouse), tagged, inspected 36. Mezzanine/ balcony used for storage marked for load capacity with rails & toe boards								
37. Damaged bags/drums recovered/ repackaged ASAP								
38. Scales certified per State Regs. **Date of last certification:**								
39. Hazardous Chemical List available (full facility)								
40. Retain samples managed								
41. Guard on compressor. Warning signs in place for automatic starting.								
42. Fork Lifts : working horn, fire extinguisher, overhead guard, good tires, rubber pads on pedals, no fluid leaks, hour meter, hand brake & backup alarm.								
43. Emergency Response Equipment accessible, inspected								
44. PPE accessible & used								
45. Pallet racks marked for capacity and properly utilized								
46. Safety Committee meets monthly (full facility)								
47. OSHA 300 form kept current within 6 days (full facility)								

NA= not applicable, or none observed during inspection OK=Acceptable NI=Needs Improvement

Safety/Environmental & Quality Item	NA	OK	NI	Action Date	Responsible Party	Date Resolved	If NI, Identify by Zone A-E	Other Comments
48. No unmarked containers of material which require analysis or identification for disposal								
49. No Smoking signs posted								
50. Flammable liquids in drums stored outside in maximum groups of 40; away from buildings								
51. Product segregated in storage by compatibility								
YARD AREA:								
52. General Housekeeping: work areas uncluttered and clear for emergency egress								
53. Slip, trip, fall hazards eliminated								
54. Rubbish containers emptied								
55. Night/security lighting & timers functional								
56. Electrical Outlet Integrity/ Unblocked								
57. Perimeter locks on fences in place/work								
58. Visitor control in place/used								
59. Damaged bags/drums recovered/ repackaged ASAP								
60. Employees use proper lifting techniques								
61. Product segregated in storage by compatibility								
62. Running, horseplay, unsafe work habits avoided								
63. PPE accessible & used								
64. Emergency Phone Numbers prominently posted								

NA= not applicable, or none observed during inspection OK=Acceptable NI=Needs Improvement

Safety/Environmental & Quality Item	NA	OK	NI	Action Date	Responsible Party	Date Resolved	If NI, Identify by Zone A-E	Other Comments
65. Diagram of fire extinguishers/emergency equipment prominently posted								
66. Fire Extinguishers (10/20# A/B/C): accessible (50'), tagged, inspected								
67. No evidence of spillage on yard & paving leading to possible regulatory censure								
68. Pallets stacked safely; broken pallet accumulation limited; none against fence								
69. Flammable liquids in drums stored outside in maximum groups of 40; away from buildings								
70. Extension cords/ portable power tools in good condition								
71. Trash receptacles away from buildings & dock								
72. Damaged bags/drums recovered/ repackaged ASAP								
73. Cylinders secured								
74. No Smoking signs posted								
75. Emergency Response Equipment accessible, inspected								
76. No unmarked containers of material which require analysis or identification for disposal								
77. Safety Shower/eyewash unobstructed & functional								
78. Perimeter fence line walked; & all sections functional								
TANK FARM/ LIQUID REPACKAGING:								
79. General Housekeeping: work areas uncluttered and clear for emergency egress								

NA= not applicable, or none observed during inspection OK=Acceptable NI=Needs Improvement

Safety/Environmental & Quality Item	NA	OK	NI	Action Date	Responsible Party	Date Resolved	If NI, Identify by Zone A-E	Other Comments
80. Slip, trip, fall hazards eliminated								
81. Rubbish containers emptied								
82. Night/security lighting & timers functional								
83. Electrical Outlet Integrity/ Unblocked/ Explosion Proof if Flammables								
84. Extension cords/ portable power tools in good condition								
85. Locks on valves in place/work								
86. Tank valves kept closed except as needed								
87. Tank ladders & catwalks in good condition								
88. Visitor control in place/used								
89. Employees use proper lifting techniques								
90. Running, horseplay, unsafe work habits avoided								
91. Safety Shower/eyewash unobstructed & functional								
92. Emergency Phone Numbers prominently posted								
93. Diagram of fire extinguishers/emergency equipment prominently posted								
94. Fire Extinguishers (10/20# A/B/C): accessible (50'), tagged, inspected								
95. No Smoking signs posted								
96. Emergency Response Equipment accessible, inspected								
97. Metal tanks maintained & grounded								
98. Dikes in good condition without cracks								

NA= not applicable, or none observed during inspection OK=Acceptable NI=Needs Improvement

Safety/Environmental & Quality Item	NA	OK	NI	Action Date	Responsible Party	Date Resolved	If NI, Identify by Zone A-E	Other Comments
99. Product transfer lines identified								
100. No evidence of line or hose drainage to dikes								
101. No valve drippage								
102. Storage tank contents identified, using NFPA signals & product name								
103. Storage valves identified by name of product								
104. Tank gauges operable; gauge glasses clear, tapes, floats functioning								
105. Pump maintenance: no seal leakage, necessary drip from packed shafts contained; shaft guards in place								
106. No excessive noise from pumps or other power equipment								
107. Engineering controls for vapor/dust collection available, used, in good condition								
108. PPE accessible , used , in good condition								
109. Grounding system used for all liquid packaging/ bulk transfers								
110. Scales certified per State Regs. **Date of last certification :**								
111. Damaged bags/drums recovered/ repackaged ASAP								
112. Lot Control implemented as past of packaging process								
113. IBCs in test per DOT date or segregated for testing								
114. IBCs labeled/marked per DOT/OSHA								
115. Guard on compressor. Warning sign in place for automatic starting.								

NA= not applicable, or none observed during inspection OK=Acceptable NI=Needs Improvement

Safety/Environmental & Quality Item	NA	OK	NI	Action Date	Responsible Party	Date Resolved	If NI, Identify by Zone A-E	Other Comments
116. Transfer hoses inspected								
117. No unmarked containers of material which require analysis or identification for disposal								
118. Waste tank disposal records maintained								
119. Retain samples managed								
LOADING / UNLOADING AREA								
120. Dock plates								
121. Safety Shower/eyewash unobstructed & functional								
122. Edge of dock clearly marked								
123. PPE accessible , used , maintained								
124. No Smoking signs posted								
125. Employees use proper lifting techniques								
126. Cylinders secured								
TRANSPORTATION EQUIPMENT								
127. Grounding system used for all liquid bulk transfers								
128. Transfer hoses inspected								
129. Fork Lifts : working horn, fire extinguisher, overhead guard, good tires, rubber pads on pedals, no fluid leaks, parking brake								
130. Wheel Chocks: Access/Use								
131. Equipped with Fire Extinguisher/ Spill response kit/ PPE								
132. Preventive Maintenance Scheduled								
133. Drivers complete daily written inspections/ logs								

NA= not applicable, or none observed during inspection OK=Acceptable NI=Needs Improvement

Safety/Environmental & Quality Item	NA	OK	NI	Action Date	Responsible Party	Date Resolved	If NI, Identify by Zone A-E	Other Comments
RAIL SIDING								
134. Rail siding clean of spilled product/trash; tracks/ties appear safe								
135. Derail devices in place where required; rail tank car flagged when connected; wheels chocked during bulk unloading								
136. Safety shower/eyewash function; fire extinguisher accessible; static lines in place/functional								

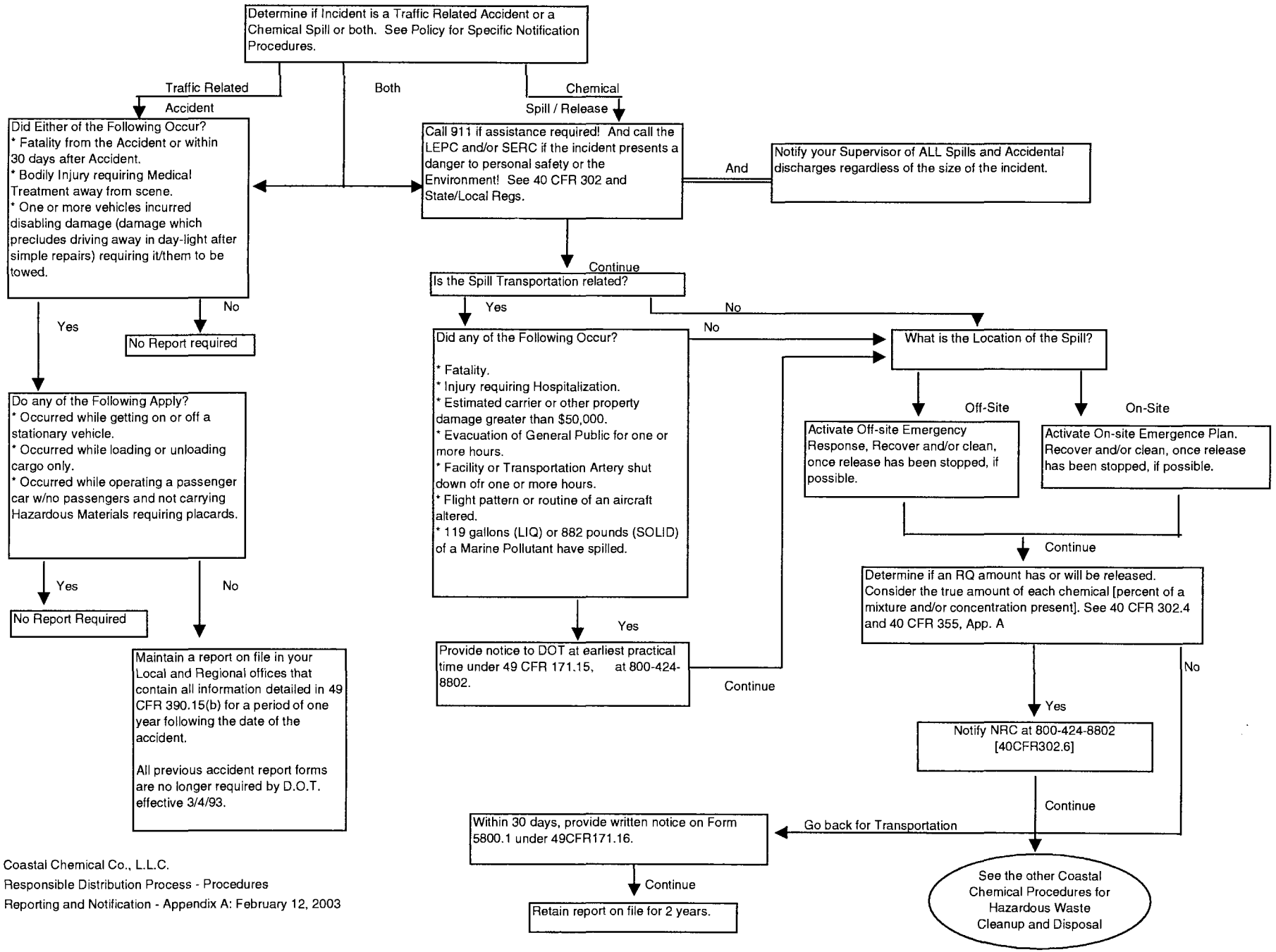
ARU/GDU

INSPECTOR(S) NAME(S) : _____

INSPECTOR(S) SIGNATURE(S): _____

#17

NOTIFICATION TO OUTSIDE AGENCIES IN THE EVENT OF A VEHICLE ACCIDENT OR CHEMICAL SPILL/RELEASE



Coastal Chemical Co., L.L.C.
Responsible Distribution Process - Procedures
Reporting and Notification - Appendix A: February 12, 2003

#11

20. If all is in order, start the engine. Wait for air pressure, oil pressure, and other gauges to show normal.

21. With caution, drive away slowly.

III. Personnel

A. All personnel are to be instructed in the following Spill Prevention Control and Countermeasure Plans.

1. No tanks or compartments are to be filled without first checking the reserves on hand.

2. No pumps are to be operated unless attended continuously.

DRIVERS WILL BE IN ATTENDANCE AT ALL TIMES WHILE LOADING OR UNLOADING PRODUCT.

3. Instructions will be held on Spill Prevention, Containment and Retrieval methods.

4. Instructions and phone numbers are to be posted in the office in regard to reporting all spills.

3.4 INCIDENT INVESTIGATION

A. Coastal Chemical Co., L.L.C. will investigate and report on all incidents of chemical spills, releases, accidents and near misses of any kind. An action plan for corrective action will be developed and implemented to prevent reoccurrence.

B. Investigations are initiated as promptly as possible, but no later that 48 hours following the incident.

C. The incident investigation team includes as a minimum:
- The employee involved in the incident, if able.
- at least one employee knowledgeable in the process of operation involved in the incident.
- A contractor representative, if the incident involved work of a contractor.
- Facility Manager

D. The incident investigation report is a Quality Record # 001-03. If the situation involves DOT, than a DOT form 5800.1 will also be used.

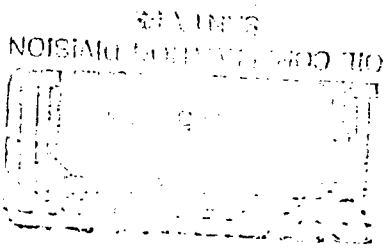
E. The Facility Manager is responsible for addressing Incident Investigation Report Findings.

F. Resolutions and corrective actions are documented as appendices to the original Incident Investigation Report, and filed with that report. Incident investigation reports are retained for five years.

G. Facility Managers ensure that Incident Investigation Reports are reviewed with all affected personnel, whose job tasks are relevant to the incident findings, including contract employees where applicable. This review is considered a Safety meeting and is documented through Safety Meeting Minutes, which are a Quality Record.

OCD

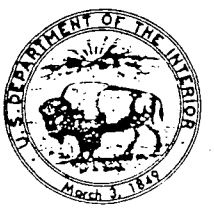
AVAILABILITY OF HYDROLOGIC DATA IN SAN JUAN COUNTY, NEW MEXICO



U.S. GEOLOGICAL SURVEY
Open-File Report 84-608

Attachment No. 3
Coastal Chemical Inc.
GW-222

Prepared in cooperation with
SAN JUAN COUNTY COMMISSION, NEW MEXICO



AVAILABILITY OF HYDROLOGIC DATA IN SAN JUAN COUNTY, NEW MEXICO

By

R. L. Klausing and G. E. Welder

ABSTRACT

Information collected in San Juan County, New Mexico, at 1,877 water wells, 39 streamflow-gaging stations, and 172 springs are presented. The collection sites and geology are shown on a base map with a scale of 1 inch = 2 miles.

INTRODUCTION

San Juan County is in the northwestern corner of New Mexico (fig. 1). Surface water from the San Juan, Animas, and La Plata Rivers has been a principal source of water for the county, but the water in these streams is fully appropriated. Ground water is present in San Juan County in several bedrock formations and in the alluvium of the river valleys.

The purpose of this report is to describe the types of hydrologic data that have been collected in San Juan County, to present examples of the data, to show the locations of the data-collection sites, and to indicate where more complete records may be obtained. This report is intended to serve as a data base that may be helpful in assessing the quantity, quality, and availability of the county's water resources.

The study was conducted by the U.S. Geological Survey in cooperation with the San Juan County Commission from July 1, 1983 to July 1, 1984.

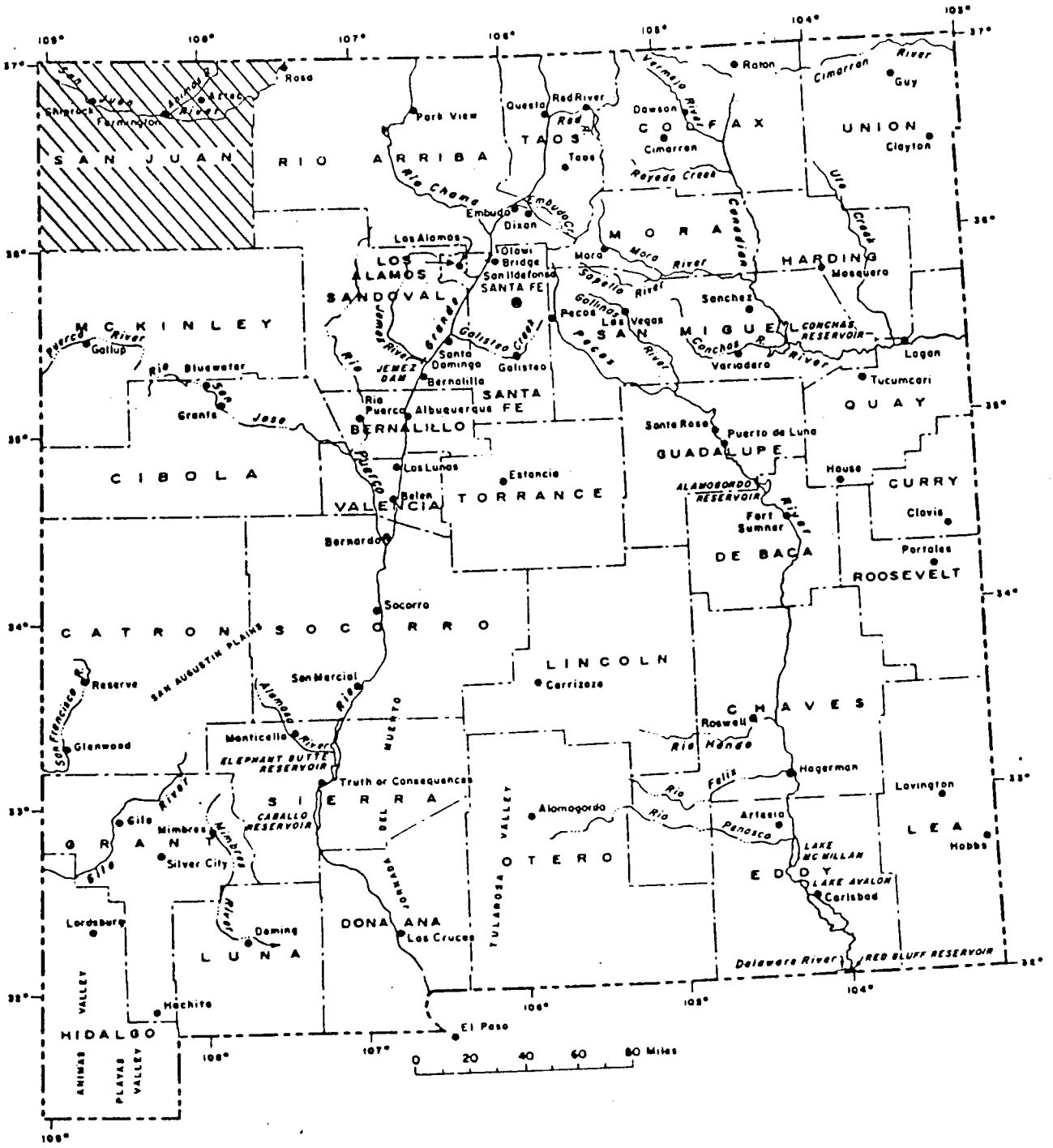


Figure 1.--Location of San Juan County, New Mexico.

PRESENTATION OF THE DATA

Information is presented in this report about water wells, springs, and streamflow-gaging stations in San Juan County. The locations and descriptive information for 1,877 wells, 172 springs, and 39 streamflow-gaging stations are listed in the tables. The locations of wells and gaging stations are shown on plate 1, as are springs with yields exceeding 10 gallons per minute. The generalized distribution of geologic formations that are exposed at the land surface is also shown on plate 1.

The hydrologic information in table 1 is a duplication of some of the data that were compiled by the U.S. Geological Survey for table 1 of the report by Stone and others (1983). Table 1 is a compilation of information on wells and springs that were in existence in San Juan County prior to 1978. Included in the table are 887 wells and 172 springs; 406 wells and 144 springs are on the Navajo Indian Reservation in the western half of the county. The lines at the left margin of table 1 indicate wells or springs that are a few miles outside of the county; this information may be useful in defining hydrologic conditions near the eastern or southern county boundaries.

Hydrologic data furnished by the New Mexico State Engineer Office are included in table 2. The data are preliminary and subject to revision. Generally, the wells listed in this table were drilled from 1978 to 1983. Included in the table are 990 wells in San Juan County; 43 wells are in the western half of the county on the Navajo Indian Reservation. Most of the wells in the vicinity of the towns of Bloomfield, Farmington, and Aztec are shallow domestic wells drilled in the Animas, La Plata, and San Juan River valleys. The lines at the left margin of table 2 indicate wells that are a few miles east of the county; this well data may be useful in defining hydrologic conditions near the eastern boundary of the county.

Descriptions of 39 streamflow-gaging stations are listed in table 3. Twenty-one of the stations were active in 1984 and the remainder were in use at various times in the past. The stations are located on the Animas, Chaco, La Plata, and San Juan Rivers, and their tributaries which flow through San Juan County. Twenty-eight of the stations are located in San Juan County, New Mexico, four in McKinley County, New Mexico, six in Colorado, and one in Utah. The descriptions include a detailed location, the size of the drainage area upstream from the station, the period of record, the type and altitude of the gage, miscellaneous remarks concerning the quality of the record and the availability of water-quality data, and the average and extreme discharges. Daily discharges are given for the 1982 water year (October 1, 1981, through September 30, 1982) or the last year of record for a discontinued station. The stations listed in the table are the principal collection sites for surface-water data published by the U.S. Geological Survey.

Additional information about many of the wells listed in tables 1 and 2 is available from the sources given in table 1 and from the U.S. Geological Survey and the State Engineer Office in Albuquerque, New Mexico. Stream-discharge data for the period of record of the 39 stations listed in table 3 are available from computer files of the U.S. Geological Survey. Water-quality data that have been collected at the wells and streamflow-gaging stations indicated by the solid symbols on plate 1 are also available from the U.S. Geological Survey or the New Mexico Bureau of Mines and Mineral Resources in Socorro.

USE OF THE MAP AND DATA TABLES

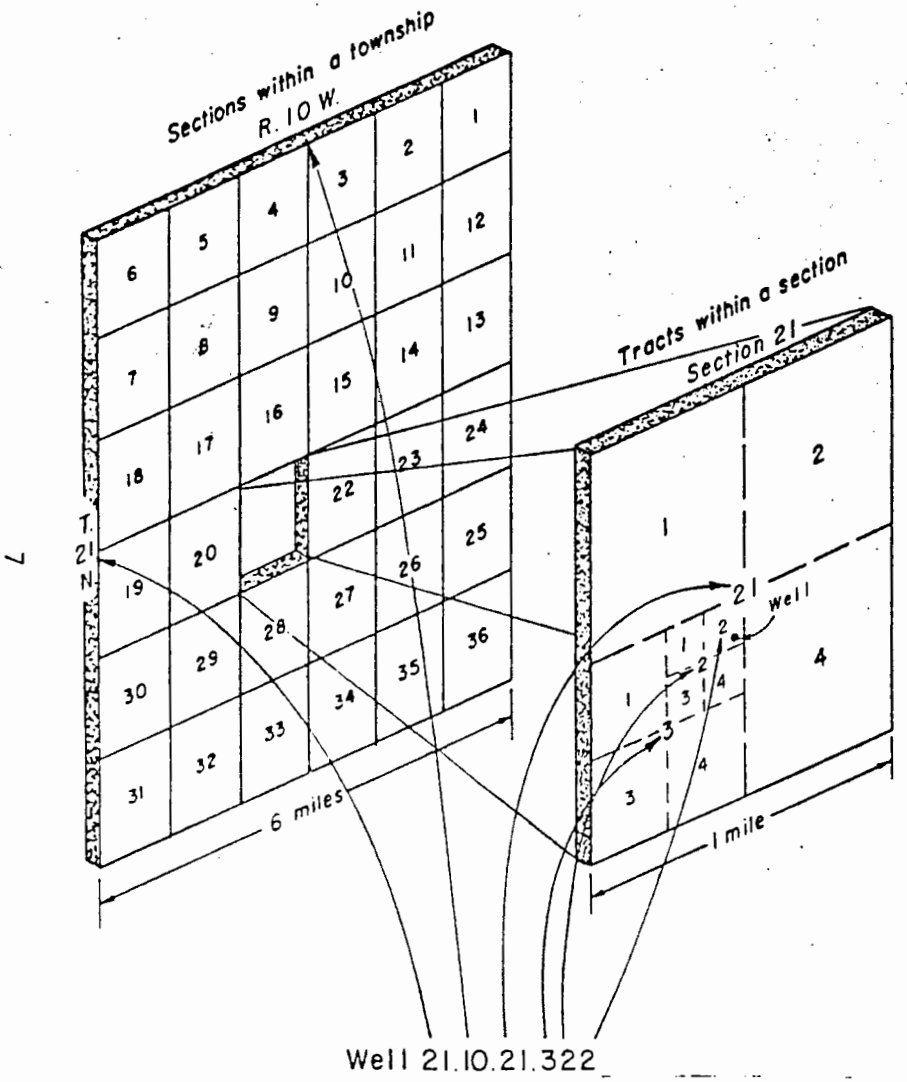
The locations where hydrologic data have been collected are shown on plate 1. The hydrologic conditions at a known well site, for example, may be projected to an adjacent site where new water supplies might be needed, if geologic conditions are similar. Such extrapolations, however, need to be made with caution.

The stream-discharge data given in table 3 (station locations on plate 1) provide information on streamflow characteristics, such as average and peak flows and surface-water quality. This information may be used to determine the relative amounts of water than can be delivered to surface-water users, to estimate quantities of water that may be available for future use, to determine high- and low-water stream stages, and to aid in designing roads, bridges, and other structures.

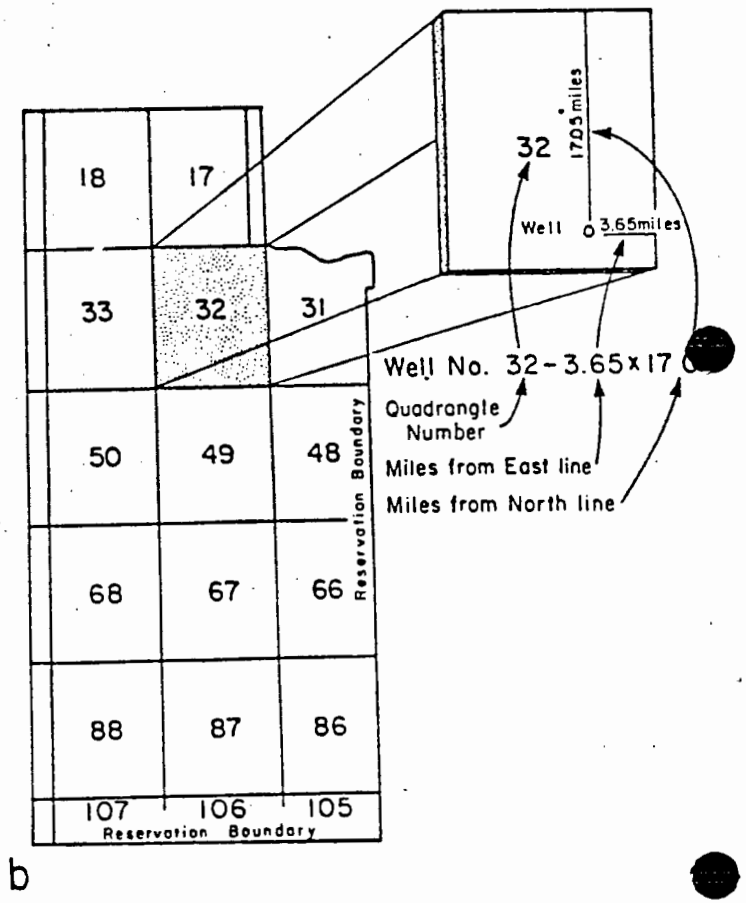
WELL-NUMBERING SYSTEMS

Two numbering systems are used in this report to locate a well. The first uses the common subdivision of lands into townships, ranges, and sections. In this system, the location number is divided into four segments separated by periods. The first segment indicates the township north of the New Mexico Base Line and the second denotes the range west of the New Mexico Principal Meridian. The third segment indicates the section within the township and the fourth segment indicates the tract within which the well is located. To determine the fourth segment of the location number, the section is divided into quarters numbered 1, 2, 3, and 4 for the NW¼, NE¼, SW¼, and SE¼ respectively. The quarter section may be further subdivided in a similar manner. The number of digits in the fourth segment of the location number indicates the degree of accuracy in locating the well. One digit indicates the location only could be determined to a 160-acre tract; two digits, 40-acre tract; three digits, 10-acre tract; and four digits, 2½-acre tract. A well with a location number 21.07.28.213 is located in the southwest ¼ of the northwest ¼ of the northeast ¼ of section 28, Township 21 North Range 7 West (fig. 2).

A different numbering system is used for the main part of the Navajo Reservation. This area is divided into 15-minute quadrangles, each of which is assigned a number. The well number consists of the quadrangle number followed by the distance in miles from the east line and the distance in miles from the north line, in that order. Thus, a well numbered 32 - 3.65 x 17.05 is in quadrangle number 32, 3.65 miles from the east line and 17.05 from the north line as shown in figure 2.



Township and Range System of numbering wells in New Mexico



System of numbering wells on the Navajo Indian Reservation

Figure 2.--Well-numbering systems.

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Stone, W. J., Lyford, F. P., Frenzel, P. F., Mizell, N. H., and Padgett, E. T., 1983, Hydrology and water resources of San Juan basin, New Mexico: New Mexico Bureau of Mines and Mineral Resources, Hydrologic Report 6, 70 p., 103 figs., 14 tables.

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Table 1.--Records of water wells and springs in San Juan County prior to 1978

EXPLANATION

LOCATION.--The location of a well or spring is described by using the system of quartering by sections (example: 24.13.9.134) or the numbering system for the Navajo Reservation (example: 33-7.16x8.96). The systems are explained in the text and shown in figure 2. All locations are defined as accurately as possible with the information available.

LATITUDE-LONGITUDE.--Latitude and longitude are reported in degrees, minutes, and seconds (example: 363010 1084525 = lat 36° 30' 10" N, long 108° 45' 25" W). If the exact location of a well or spring is unknown, the latitude and longitude at the center of the smallest subdivision of a section as indicated in the location number is given. Latitudes and longitudes were not computed for sites that could not be located more accurately than a quarter section.

NUMBER OR NAME.--The number or name assigned to a well may be the owner's name or number, the BIA or Navajo name or number, a traditional name, or the name of a nearby landmark. Springs and dug wells are identified under this heading.

DEPTH.--Depth is the total depth of a well (in feet) below land surface that was obtained from driller's records, measured (M) by U.S. Geological Survey, reported by individuals, or estimated (E). Wells that have been plugged back or deepened have the original depth noted in "Remarks". If the depth is questionable, it is marked with a "Q".

ALTITUDE.--Altitude of the land surface (in feet) above sea level at the well or spring. If an altitude was not recorded in field data or a location was not precise, the altitude reported was at the center of the smallest subdivision of a section as indicated in the location number. Altitudes are estimated (E) at sites with vague locations.

DEPTH TO WATER.--Depth to water below land surface (in feet). Values with decimal point accuracy were measured, others reported (R) or estimated (E). A plus sign (+) indicates the water level is above the land surface. "F" indicates the well was flowing on the date given.

DATE.--The date given is that of the water-level measurement noted on the same line. If no water level is noted, a date in this column is given to establish the well's existence at that particular time.

PRODUCING INTERVAL.--Producing interval is the depth (in feet) below land surface in the well that is open to the water-bearing unit.

PRINCIPAL WATER-BEARING UNIT(S).--The abbreviations of the geologic formation(s) that contain the water-bearing units are as follows:

Quaternary:
- Qal - Alluvium
- Qc - Colluvium (landslide, talus)

Tertiary:
- Tc - Chuska Sandstone
- Tsq - San Jose Formation
- Tn - Nacimiento Formation

Tertiary-Cretaceous:
- TKoa - Ojo Alamo Sandstone
- TKi - Intrusives

Cretaceous:
- Kk - Kirtland Shale
- Kkm - Farmington Sandstone Member
- Kkf - Kirtland Shale, Fruitland Formation, undivided
- Kf - Fruitland Formation
- Kpc - Pictured Cliffs Sandstone
- Kch - Cliff House Sandstone
- Kmf - Menefee Formation
- Kpl - Point Lookout Sandstone
- Kg - Gallup Sandstone
- Kd - Dakota Sandstone

Jurassic:
- Jm - Morrison Formation
- Jmb - Brushy Basin Shale Member
- Jmw - Westwater Canyon Sandstone Member
- Jmr - Recapture Shale Member
- Jms - Salt Wash Sandstone Member
- Jb - Bluff Sandstone
- Js - Summerville Formation
- Je - Entrada Sandstone

Triassic:
- T w - Wingate Sandstone

Permian:
- Pdc - De Chelly Sandstone

Pennsylvanian:
- Penn - Pennsylvanian rocks undivided

SPECIFIC CONDUCTANCE.--Specific conductance of the water, which is a function of dissolved solids, is reported in micromhos per centimeter at 25° Celsius. An asterisk (*) indicates that a chemical analysis of common constituents is reported in table 2 of Stone and others (1983). A double asterisk (**) indicates that an analysis, which includes trace elements, is reported in table 3 of Stone and others (1983).

DATE.--The sampling date.

LOGS AVAILABLE.--The types of logs available are indicated below. Many are in the files of the U.S. Geological Survey.

DLR, driller; TOP, formation tops; COR, core analysis; SAND, sand analysis; LTH, lithologic logs; N, neutron; GR, gamma ray; RES, resistivity; IND, induction; MIC, microlog; SP, spontaneous potential; DEN, density; CAL, caliper

REFERENCE.--Much of the data in this table was compiled from sources listed below. Lower case letters indicate the sources as follows:

h, Waring and Andrews (1935); j, Baltz and West (1967); l, Shomaker, J. W., (U.S. Geological Survey) (written commun., 1967); m, Rapp (1959); n, Callahan and Harshbarger (1955); o, Halpenny and Harshbarger (1950); q, Kister and Hatchett (1963); r, Davis, Hardt, Thompson, and Cooley (1963); s, Brimhall (1973); u, Kelly (1977); a*, Shomaker (1976); c*, Brown and Stone (1979).

DRAWDOWN, DISCHARGE, DURATION.--These values are reported unless followed by an asterisk (*) which indicates that more complete aquifer-test data are available in table 4 of Stone and others (1983). Discharges are reported (R), measured (M), or estimated (E); artesian flow is indicated by "F".

REMARKS.--This column may include the following abbreviations:

R, reported; M, measured by U.S. Geological Survey; E, estimated; DST, drill-stem test; Q, quadrangle or questionable, depending on context; WBF, water-bearing formation; QW, quality of water; SWL, static water level; F, flow or flowing; WL, water level; SPC, specific conductance in micromhos at 25° Celsius, TDS, dissolved solids in milligrams per liter; TD, total depth.

FORMATION CONTACT -- Approximately located

HYDROLOGIC DATA EXPLANATION

$\frac{20}{Qal}$ WATER WELL--Number is depth of well below land surface, in feet; letters indicate geologic source of water. (See principal water bearing unit(s) in table 1, and aquifer in table 2.)

2 32x WATER WELLS--Underlined symbol with number indicates the number of closely spaced wells at one location. Number with "x" is the number of wells in that section (one square mile)

OBSERVATION WELL--Water-level measurements have been made periodically*

σ_{Tc} SPRING--Discharge generally greater than 10 gallons per minute (tables 1 and 2); letters indicate probable geologic source of water. (See geologic formation abbreviation in tables 1 and 2.)

$\triangle^{12}$ STREAMFLOW GAGING STATION--Active in 1982; number refers to station description and period of record in table 3*

STREAMFLOW GAGING STATION--Discontinued prior to 1982, number refers to station description and period of record in table 3

NOTE: Solid symbols (● ▲) indicate water-quality data are available *

* Ground-water level and surface-water discharge measurements, and water-quality data available from Water Resources Division of U.S. Geological Survey, Albuquerque, New Mexico.

Coastal Chemical - GW-222

Table 1.--Records of water wells and springs in San Juan County prior to 1978 - Continued

Location	Latitude-Longitude	Number or name	Depth (feet)	Altitude (feet)	Depth to Water (feet)	Date	Producing interval (feet)	Principal water-bearing unit(s)	Specific conductance (umhos at 25°C)	Date	Logs available	Reference	Drawdown (feet)	Discharge (gal/min)	Duration (hours)	Remarks
29.11.25.132	364158 1075653	Bur. Rec. #39	10M	5,470	1.8	04-16-68	-	Tn	6,300	04-16-68	-	-	-	-	-	-
29.11.30.211	364212 1080152	Narciso Archibeque	46	5,465	43	-	-	Qal	748 *	04-09-68	-	-	-	-	-	-
29.11.30.233	364152 1080152	Delbert Blake	9M	5,390	8.8	04-09-68	-	Qal	886 *	04-09-68	-	-	-	-	-	-
29.11.31.3321	364043 1080217	-	1,720	5,437	-	-	-	Kpc	-	-	TOP	-	-	-	-	Converted to water.
29.11.31.3342	364037 1080214	Edgar Lund	600	5,458	29.1	10-09-74	300	TKoa	-	-	-	-	-	-	-	Oil test plugged back.
29.11.31.3424	364042 1080158	Richard Sego	326	5,480	-	-	-	TKoa	-	-	-	-	-	-	-	"Not fit to drink".
29.11.34.4144	364046 1075827	-	800	5,640	-	-	-	TKoa	-	-	TOP	-	-	-	-	Source for H_2O injected; plugged back from TD of 1,355 feet.
29.12.06.133	364521 1080847	George McColm	16	5,440	6	11-24-53	-	Qal	2,250 *	11-24-53	-	m	-	10	-	-
29.12.07.4133	364417 1080817	7th Day Avent Church	234	5,600	170.5	10-08-74	-	Kkf, TKoa	2,500	10-08-74	-	-	-	-	-	-
29.12.18	-	Pan Am Pet.	-	-	-	-	1,435-1,448	Kpc	- *	04-30-59	-	m	-	-	-	TDS = 29,800 mg/L, 1959.
29.12.19.3211	364242 1080833	Thomas F. Kirby	62	5,360	45.4	04-05-68	-	Qal	2,100	04-05-68	-	-	-	-	-	-
29.12.19.3231	364235 1080837	Thomas F. Kirby	44	5,350	32.1	04-05-68	-	Qal	900	04-05-68	-	-	-	-	-	- -
29.12.20	-	-	-	-	-	-	1,550	Kpc	- *	- -590	-	m	-	-	-	Analysis only. TDS = 30,200 mg/L, 1959.
29.12.20	-	Pan Am Pet.	1,415	5,457	-	-	1,378-1,388	Kpc	59,200 *	02-22-59	-	-	-	-	-	Gas well, sample from pit.
29.12.21.3	-	-	-	-	-	-	-	-	4,090 **	03-15-74	-	-	-	-	-	Analysis only.
29.12.28	-	Pan Am	-	-	-	-	-	Kpc	- *	04-30-59	-	-	-	-	-	Gas well; TDS 37,800 mg/l
29.12.28.2111	364215 1080609	D. H. Brownlee	120	5,392	18.8	11-07-74	-	TKoa	-	-	-	-	-	-	-	Unused.
29.12.29	-	Pan Am	44	-	-	-	-	Qal	- *	04-30-59	-	m	-	-	-	Reported casing depth; TDS = 2,210 mg/L.
29.12.30	-	-	-	-	-	-	1,240	Kpc	- *	- -59	-	m	-	-	-	WBF depth = 1,240 ft; TDS = 45,600 mg/L.
29.12.33.2411	364111 1080553	-	850	5,360	F	10-21-74	-	Kkf	12,250	10-21-74	-	-	-	SE	-	Hammond Canal Well.
29.12.34.421	364056 1080450	Bureau of Reclamation	13M	5,370	5.3	04-17-68	-	Qal	2,930 *	04-17-68	-	-	-	-	-	Stovepipe casing.
29.12.34.4341	364036 1080500	Chas. Christianson	100	5,480	65.5	10-21-74	-	TKoa	-	-	-	-	-	-	-	-
29.12.35.342	364042 1080410	Bureau of Reclamation #26	6M	5,380	3.6	04-18-68	-	Qal	4,620 *	04-18-68	-	-	-	-	-	Stovepipe casing.

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Depth to Groundwater ≈ 50'

TDS (Total Dissolved Solids) = 0.75 ((2,1rv + 90V) / 2)

TDS = 1125 mg/l

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Table 1.--Records of water wells and springs in San Juan County prior to 1978 - Continued

Location	Latitude-Longitude	Number or name	Depth (feet)	Altitude (feet)	Depth to Water (feet)	Date	Producing interval (feet)	Principal water-bearing unit(s)	Specific conductance (umhos at 25°C)	Date	Logs available	Reference	Drawdown (feet)	Discharge (gal/min)	Duration (hours)	Remarks
29.12.35.342a	364042 1080410	Bureau of Reclamation #27	6M	5,390	3.5	04-18-68	-	Qal	2,140 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.35.3434	364034 1080412	J. L. Mangum	74M	5,415	45.2	04-09-68	-	Qal	2,230 *	04-09-68	-	-	-	-	-	-
29.12.35.344	364035 1080408	Bureau of Reclamation #28	14M	5,400	9.9	04-18-68	-	Qal	2,190 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.35.4443	364033 1080339	E. D. Brimhall	50	5,420	28.0	10-09-74	-	Qal	4,020	10-09-74	-	-	-	-	-	-
29.12.36.144	364102 1080305	Bureau of Reclamation #88	9M	5,390	7.8	04-18-68	-	Qal	5,620 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.36.311	364055 1080330	Bureau of Reclamation #23	13M	5,385	6.1	04-18-68	-	Qal	1,410 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.36.311a	364055 1080330	Bureau of Reclamation #89	7M	5,380	1.8	04-18-68	-	Qal	10,500 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.36.332	364042 1080322	Bureau of Reclamation #22	18M	5,405	14.3	04-18-68	-	Qal	872 *	04-18-68	-	-	-	-	-	Stovepipe casing.
29.12.36.4343	364034 1080249	C. J. Burnham	280	5,425	40	10-10-74	-	TKoa	4,700	10-10-74	-	-	-	-	-	-
29.13	-	Brimhall Ranch	365	-	280	07-21-52	-	-	-	-	-	-	-	3	-	-
29.13.1Q	-	H. L. Baily	-	-	-	-	-	Kk	-	-	-	-	-	-	-	-
29.13.7.1442	364430 1081450	Dept. of Interior	72	5,250	17.6	10-29-74	-	Kk	5,200	11-05-65	-	-	-	-	-	-
29.13.11.221	364450 1081008	F. L. Lee	125	5,380	15	02-19-59	-	Kk, Qal	1,000 *	02-19-59	-	-	-	-	-	-
29.13.12.2344	364428 1080912	Dr. Williams	250M	5,566	-	-	-	Kk	-	-	-	-	-	-	-	Well is plugged with sand.
29.13.12.3441	364406 1080930	Full Gospel Revival	140	5,470	59.0	10-07-74	-	Kk	-	-	-	-	-	-	-	Poor producer; water is hauled in.
29.13.14.443	364312 1081010	Dowell Inc.	100	5,330	15	02-23-59	90-100	Kk, Qal	901 *	02-23-59	-	-	-	-	-	-
29.13.15.324	364325 1081138	Carl Kennedy	40	5,305	8	02-23-59	-	Qal	929 *	02-23-59	-	-	-	-	-	-
29.13.15.413	364325 1081130	McCormick School	80	5,315	8	02-23-59	-	Qal	598 *	02-23-59	-	-	-	-	-	Sample questionable.
29.13.17.441	364319 1081322	Am Navajo Mission	35	5,420	6	02-23-59	-	Qal	-	-	-	-	-	-	-	Analysis incomplete.
29.13.18.2414	364342 1081425	-	959	5,249	-	-	-	-	-	-	TDF	-	-	-	-	Source for injection H_2O; plugged back.
29.13.28.2	-	O. J. Carson	10	5,300E	6	11-25-33	-	Qal	- *	11-25-33	-	-	-	-	-	-
29.13.36.322	364054 1080926	Spring	-	5,460	-	-	-	Tn	3,000	04-10-68	-	-	-	-	-	No discharge observed 4-10-68.
29.14.02.1422	364533 1081642	Locke Arroyo Well	56M	5,460	46.4	11-19-74	-	Kk	-	-	-	-	-	-	-	Abandoned.

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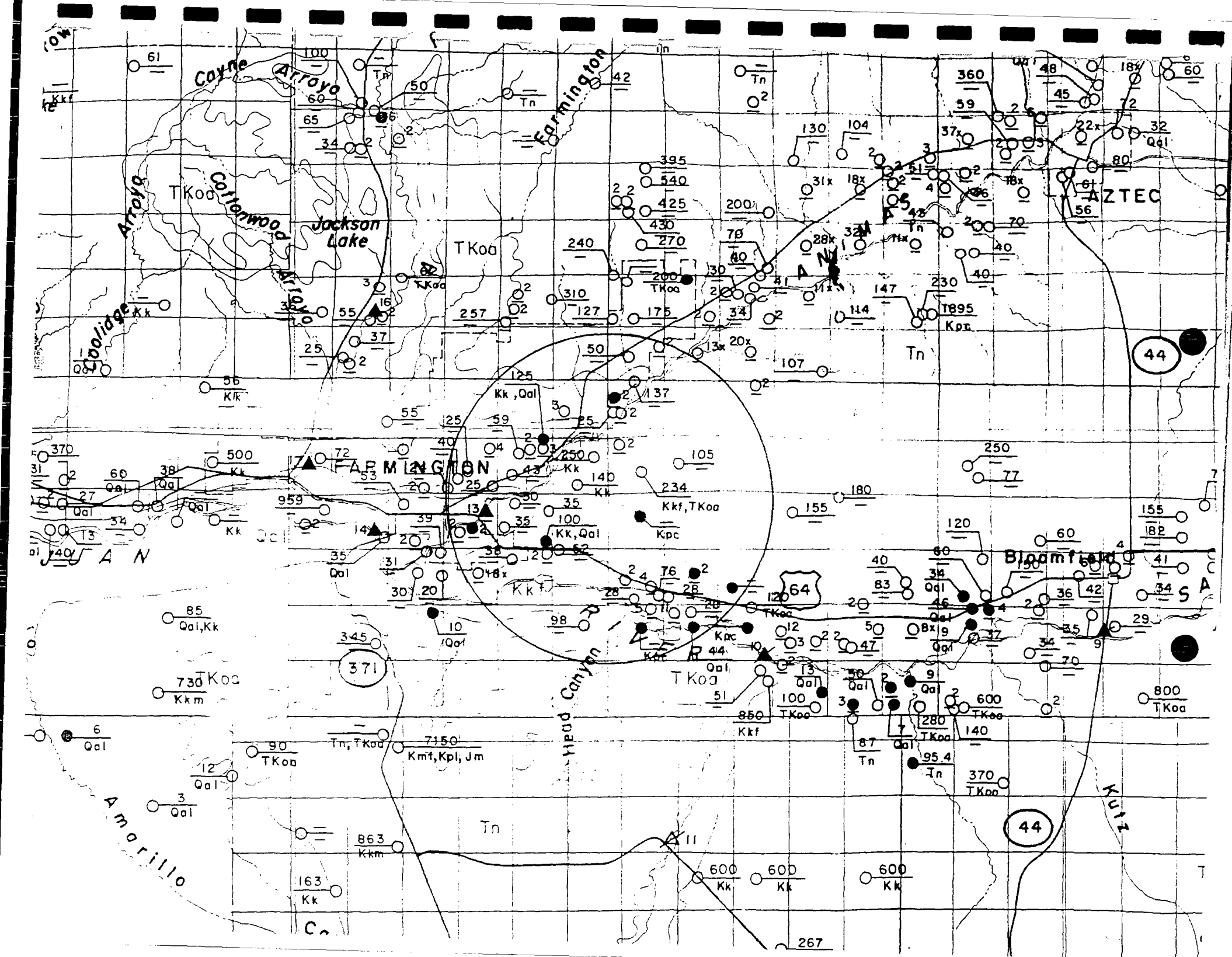
Table 2.—Records of water wells in San Juan County, 1978-83 - Continued

LOCATION	NAME	WELL NUMBER	USE	DEPTH	PERFORATIONS	AQUIFER
29.13.11.231	Hodges, Robert E.	SJ-0310	dom	45		
29.13.11.3	Deyapp, Lawrence	SJ-0301	dom, stk	43		
29.13.14.1	Tenski, Steve L.	SJ-0716	dom	30		
29.13.14.24	Rice, Ivan M.	SJ-1635	dom	35		
29.13.14.313	Valley Drive In Inc.	SJ-0176	dom, stk	35	28-34	
29.13.15.3	El Paso Natural Gas	SJ-0030	ind	29		
29.13.15.3	El Paso Natural Gas	SJ-0031		75		
29.13.16.34	Drake, J. A.	SJ-0453	stk	44		
29.13.16.344	Bell, Llyod	SJ-1443	dom, stk	40		
29.13.18.322	Lower Valley MDWCA	SJ-0172	exp	30		
29.13.18.322	Lower Valley MDWCA	SJ-0172-X	exp	30'		
29.13.21.21	Garcia, James	SJ-0167	dom	31	19-25	
29.13.21.22	Graham, Feliberto	SJ-1689	dom	39		
29.13.21.422	Vigil, Horacio	SJ-0737	dom, stk	20		
29.13.22.134	Maestas, Florencio E	SJ-0891	dom	33		
29.13.22.14	Esparza, Betty R.	SJ-1765	dom	39		
29.13.22.21	Graham, Arnold M.	SJ-0784	dom	43		
29.13.22.22	Burke, Dennis R.	SJ-1673	dom	46		
29.13.22.311	Sanchez, Benny	SJ-0719	dom, stk	23		
29.13.22.312	Denny, Lee L.	SJ-0757	dom	32		
29.13.22.313	D'A Gastino, Peter	SJ-0725	dom	26		
29.13.22.313	Freeman, David R.	SJ-0724	dom	28		
29.13.22.314	Head, Harry	SJ-1151	dom	32		
29.13.22.314	Norton, Emmett	SJ-1525	dom	35		
29.13.22.34	Kimbell, Lloyd	SJ-0972	dom,stk	35		
29.13.23.1	Kannard, Tom	SJ-1562	dom	38		
29.13.23.22	Barkley, Mary A.	SJ-0352	dom	62		
29.13.23.22	Pratt, Tim	SJ-1376	dom	15		
29.13.24.111	Neidish, Raymond W.	SJ-1087	irr	52		
29.13.25.233	Bolack, Tommy	SJ-1665	dom	98		
29.13.29.4	Four States Televisi	SJ-1371	san	345		
29.14.06.333	Hansen, Paul F.	SJ-1407	dom	70		
29.14.07.11	Helmer, Grodon	SJ-1568	dom	72		
29.14.07.113	Swearingen, Jack M.	SJ-0226	dom, stk	100		
29.14.07.413	Harris, Lowell	SJ-0451	dom,stk	24		
29.14.08.	Sterling, Hugh	SJ-0947	dom, stk	370		


Coyne Arroyo
Farmington
Arroyo
Cottonwood Arroyo
Jackson Lake
Coolidge
TKoa
Tn
Kkf
Kk
Qal
FARMINGTON
AZTEC
Bloomfield
SAN JUAN
Kkf
Kpc
Kmf, Kpl, Jm
Tn, TKoa
Head Canyon
Amarillo
44
64
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Appendix D

XIII. A.

GUIDELINES

FOR

REMEDIATION

OF

LEAKS, SPILLS AND RELEASES

Attachment No. 4
Coastal Chemical Inc.
GW-222

New Mexico Oil Conservation Division

INTRODUCTION

The following document is to be used as a guide on all federal, state and fee lands when remediating contaminants resulting from leaks, spills and releases of oilfield wastes or products. The New Mexico Oil Conservation Division (OCD) requires that corrective actions be taken for leaks, spills or releases of any material which has a reasonable probability to injure or be detrimental to public health, fresh waters, animal or plant life, or property or unreasonably interfere with the public welfare or use of the property. These guidelines are intended to provide direction for remediation of soils and fresh waters contaminated as a result of leaks, spills or releases of oilfield wastes and products in a manner that assures protection of fresh waters, public health and the environment.

Fresh waters (to be protected) includes the water in lakes, playas, surface waters of all streams regardless of the quality of the water within any given reach, and all underground waters containing 10,000 milligrams per liter (mg/l) or less of total dissolved solids (TDS) except for which, after notice and hearing, it is found that there is no present or reasonably foreseeable beneficial use which would be impaired by contamination of such waters. The water in lakes and playas shall be protected from contamination even though it may contain more than 10,000 mg/l of TDS unless it can be shown that hydrologically connected fresh ground water will not be adversely affected.

Procedures may deviate from the following guidelines if it can be shown that the proposed procedure will either remediate, remove, isolate or control contaminants in such a manner that fresh waters, public health and the environment will not be impacted. Specific constituents and/or requirements for soil and ground water analysis and/or remediation may vary depending on site specific conditions. Deviations from approved plans will require OCD notification and approval.

****** Note:** **Notification to OCD of leaks, spills and releases does not relieve an operator of responsibility for compliance with any other federal, state or local law and/or regulation regarding the incident. Other agencies (ie. BLM, Indian Tribes, etc) may also have guidelines or requirements for remediation of leaks spills and releases.**

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I. NOTIFICATION OF LEAK, SPILL OR RELEASE

Leaks, spills and releases of any wastes or products from oilfield operations are required to be reported to the OCD pursuant to OCD Rule 116 (Appendix A) or New Mexico Water Quality Control Commission (WQCC) Regulation 1-203 (Appendix B). Appendix C contains the phone numbers and addresses for reporting incidents to the OCD district and Santa Fe offices. Notification will include all information required under the respective rule or regulation. Below is a description of some of the information required:

A. RESPONSIBLE PARTY AND LOCAL CONTACT

The name, address and telephone number of the person/persons in charge of the facility/operation as well as the owner and/or operator of the facility/operation and a local contact.

B. FACILITY

The name and address of the facility or operation where the incident took place and the legal location listed by quarter-quarter, section, township and range, and by distance and direction from the nearest town or prominent landmark so that the exact site location can be readily located on the ground.

C. TIME OF INCIDENT

The date, time and duration of the incident.

D. DISCHARGE EVENT

A description of the source and cause of the incident.

E. TYPE OF DISCHARGE

A description of the nature or type of discharge. If the material leaked, spilled or released is anything other than crude oil, condensate or produced water include its chemical composition and physical characteristics.

F. QUANTITY

The known or estimated volume of the discharge.

G. SITE CHARACTERISTICS

The relevant general conditions prevailing at the site including precipitation, wind conditions, temperature, soil type, distance to nearest residence and population centers and proximity of fresh water wells or watercourse (ie. any river, lake, stream, playa, arroyo, draw, wash, gully or natural or man-made channel through which water flows or has flowed).

H. IMMEDIATE CORRECTIVE ACTIONS

Any initial response actions taken to mitigate immediate threats to fresh waters, public health and the environment.

the vertical distance from the lowermost contaminants to the seasonal high water elevation of the ground water. If the exact depth to ground water is unknown, the ground water depth can be estimated using either local water well information, published regional ground water information, data on file with the New Mexico State Engineer Office or the vertical distance from adjacent ground water or surface water.

2. Wellhead Protection Area

The operator should determine the horizontal distance from all water sources including private and domestic water sources. Water sources are defined as wells, springs or other sources of fresh water extraction. Private and domestic water sources are those water sources used by less than five households for domestic or stock purposes.

3. Distance To Nearest Surface Water Body

The operator should determine the horizontal distance to all downgradient surface water bodies. Surface water bodies are defined as perennial rivers, streams, creeks, irrigation canals and ditches, lakes, ponds and playas.

B. SOIL/WASTE CHARACTERISTICS

Soils/wastes within and beneath the area of the leak, spill or release should be evaluated to determine the type and extent of contamination at the site. In order to assess the level of contamination, observations should be made of the soils at the surface and samples of the impacted soils should be taken in the leak, spill or release area. Observations should note whether previous leaks, spills or releases have occurred at the site. Additional samples may be required to completely define the lateral and vertical extent of contamination. Soil samples should be obtained according to the sampling procedures in Sections V.A. and V.B. This may be accomplished using a backhoe, drill rig, hand auger, shovel or other means.

Initial assessment of soil contaminant levels is not required if an operator proposes to determine the final soil contaminant concentrations after a soil removal or remediation pursuant to section VI.A.

Varying degrees of contamination described below may co-exist at an individual site. The following sections describe the degrees of contamination that should be documented during the assessment of the level of soil contamination:

1. Highly Contaminated/Saturated Soils

Highly contaminated/saturated soils are defined as those soils which contain a free liquid phase or exhibit gross staining.

2. **Unsaturated Contaminated Soils**

Unsaturated contaminated soils are defined as soils which are not highly contaminated/saturated, as described above, but contain benzene, toluene, ethylbenzene and xylenes (BTEX) and total petroleum hydrocarbons (TPH) or other potential fresh water contaminants unique to the leak, spill or release. Action levels and sampling and analytical methods for determining contaminant concentrations are described in detail in Sections IV. and V.

**** **(NOTE: Soils contaminated as a result of spills, leaks or releases of non-exempt wastes must be evaluated for all RCRA Subtitle C hazardous waste characteristics. The above definitions apply only to oilfield contaminated soils which are exempt from federal RCRA Subtitle C hazardous waste provisions and nonexempt oilfield contaminated soils which are characteristically nonhazardous according to RCRA Subtitle C regulations. Any nonexempt contaminated soils which are determined to be characteristically hazardous cannot be remediated using this guidance document and will be referred to the New Mexico Environment Department Hazardous Waste Program.)**

C. GROUND WATER QUALITY

If ground water is encountered during the soil/waste characterization of the impacted soils, a sample should be obtained to assess the incidents potential impact on ground water quality. Ground water samples should be obtained using the sampling procedures in Section V.C. Monitor wells may be required to assess potential impacts on ground water and the extent of ground water contamination, if there is a reasonable probability of ground water contamination based upon the extent and magnitude of soil contamination defined during remedial activities.

IV. SOIL AND WATER REMEDIATION ACTION LEVELS

A. SOILS

The sections below describe the OCD's recommended remediation action levels for soils contaminated with petroleum hydrocarbons. Soils contaminated with substances other than petroleum hydrocarbons may be required to be remediated based upon the nature of the contaminant and it's potential to impact fresh waters, public health and the environment.

1. Highly Contaminated/Saturated Soils

All highly contaminated/saturated soils should be remediated insitu or excavated to the maximum extent practicable. These soils should be remediated using techniques described in Section VI.A to the contaminant specific level listed in Section IV.A.2.b.

2. Unsaturated Contaminated Soils

The general site characteristics obtained during the site assessment (Section III.A.) will be used to determine the appropriate soil remediation action levels using a risk based approach. Soils which are contaminated by petroleum constituents will be scored according to the ranking criteria below to determine their relative threat to public health, fresh waters and the environment.

a. Ranking Criteria

Depth To Ground Water	Ranking Score
<50 feet	20
50 - 99	10
>100	0

Wellhead Protection Area

<1000 feet from a water source,or;
<200 feet from private domestic water source

Yes	20
No	0

Distance To Surface Water Body

<200 horizontal feet	20
200 - 1000 horizontal feet	10
>1000 horizontal feet	0

b. Recommended Remediation Action Level

The total ranking score determines the degree of remediation that may be required at any given site. The total ranking score is the sum of all four individual ranking criteria listed in Section IV.A.2.a. The table below lists the remediation action level that may be required for the appropriate total ranking score.

(NOTE: The OCD retains the right to require remediation to more stringent levels than those proposed below if warranted by site specific conditions (ie. native soil type, location relative to population centers and future use of the site or other appropriate site specific conditions.)

	Total Ranking Score		
	>19	10 - 19	0 - 9
Benzene(ppm)*	10	10	10
BTEX(ppm)*	50	50	50
TPH(ppm)**	100	1000	5000

* A field soil vapor headspace measurement (Section V.B.1) of 100 ppm may be substituted for a laboratory analysis of the Benzene and BTEX concentration limits.

** The contaminant concentration for TPH is the concentration above background levels.

B. GROUND WATER

Contaminated ground water is defined as ground water of a present or foreseeable beneficial use which contains free phase products, dissolved phase volatile organic constituents or other dissolved constituents in excess of the natural background water quality. Ground water contaminated in excess of the WQCC ground water standards or natural background water quality will require remediation.

V. SOIL AND WATER SAMPLING PROCEDURES

Below are the sampling procedures for soil and ground water contaminant investigations of leaks, spills or releases of RCRA Subtitle C exempt oil field petroleum hydrocarbon wastes. Leaks, spills or releases of non-exempt RCRA wastes must be tested to demonstrate that the wastes are not characteristically hazardous according to RCRA regulations. Sampling for additional

constituents may be required based upon the nature of the contaminant which was leaked, spilled or released.

A. HIGHLY CONTAMINATED OR SATURATED SOILS

The following method is used to determine if soils are highly contaminated or saturated:

1. Physical Observations

Study a representative sample of the soil for observable free petroleum hydrocarbons or immiscible phases and gross staining. The immiscible phase may range from a free hydrocarbon to a sheen on any associated aqueous phase. A soil exhibiting any of these characteristics is considered highly contaminated or saturated.

B. UNSATURATED CONTAMINATED SOILS

The following methods may be used for determining the magnitude of contamination in unsaturated soils:

1. Soil Sampling Procedures for Headspace Analysis

A headspace analysis may be used to determine the total volatile organic vapor concentrations in soils (ie. in lieu of a laboratory analysis for benzene and BTEX but not in lieu of a TPH analysis). Headspace analysis procedures should be conducted according to OCD approved industry standards or other OCD-approved procedures. Accepted OCD procedures are as follows:

a) Fill a 0.5 liter or larger jar half full of sample and seal the top tightly with aluminum foil or fill a one quart zip-lock bag one-half full of sample and seal the top of the bag leaving the remainder of the bag filled with air.

b) Ensure that the sample temperature is between 15 to 25 degrees Celsius (59-77 degrees Fahrenheit).

c) Allow aromatic hydrocarbon vapors to develop within the headspace of the sample jar or bag for 5 to 10 minutes. During this period, the sample jar should be shaken vigorously for 1 minute or the contents of the bag should be gently massaged to break up soil clods.

d) If using a jar, pierce the aluminum foil seal with the probe of either a PID or FID organic vapor meter (OVM), and then record the highest (peak) measurement. If using a bag, carefully open one end of the bag and insert the probe of the OVM into the bag and re-seal the bag around the probe as much as possible to prevent vapors from escaping. Record the peak measurement. The OVM must be calibrated to assume a benzene response factor.

2. **Soil Sampling Procedures For Laboratory Analysis**

a. Sampling Procedures

Soil sampling for laboratory analysis should be conducted according to OCD approved industry standards or other OCD-approved procedures. Accepted OCD soil sampling procedures and laboratory analytical methods are as follows:

i) Collect samples in clean, air-tight glass jars supplied by the laboratory which will conduct the analysis or from a reliable laboratory equipment supplier.

ii) Label the samples with a unique code for each sample.

iii) Cool and store samples with cold packs or on ice.

iv) Promptly ship sample to the lab for analysis following chain of custody procedures.

v) All samples must be analyzed within the holding times for the laboratory analytical method specified by EPA.

b. Analytical Methods

All soil samples must be analyzed using EPA methods, or by other OCD approved methods and must be analyzed within the holding time specified by the method. Below are laboratory analytical methods commonly accepted by OCD for analysis of soil samples analyzed for petroleum related constituents. Additional analyses may be required if the substance leaked, spilled or released has been anything other than petroleum based fluids or wastes.

i) Benzene, toluene, ethylbenzene and xylene

- EPA Method 602/8020

ii) Total Petroleum Hydrocarbons

- EPA Method 418.1, or;
- EPA Method Modified 8015

C. GROUND WATER SAMPLING

If an investigation of ground water quality is deemed necessary, it should be conducted according to OCD approved industry standards or other OCD-approved procedures. The following methods are standard OCD accepted methods which

should be used to sample and analyze ground water at RCRA Subtitle C exempt sites (Note: The installation of monitor wells may not be required if the OCD approves of an alternate ground water investigation or sampling technique):

1. **Monitor Well Installation/Location**

One monitor well should be installed adjacent to and hydrologically down-gradient from the area of the leak, spill or release to determine if protectable fresh water has been impacted by the disposal activities. Additional monitor wells, located up-gradient and down-gradient of the leak, spill or release, may be required to delineate the full extent of ground water contamination if ground water underlying the leak, spill or release has been found to be contaminated.

2. **Monitor Well Construction**

a) Monitor well construction materials should be:

i) selected according to industry standards;

ii) chemically resistant to the contaminants to be monitored; and

iii) installed without the use of glues/adhesives.

b) Monitor wells should be constructed according to OCD approved industry standards to prevent migration of contaminants along the well casing. Monitor wells should be constructed with a minimum of fifteen (15) feet of well screen. At least five (5) feet of the well screen should be above the water table to accommodate seasonal fluctuations in the static water table.

3. **Monitor Well Development**

When ground water is collected for analysis from monitoring wells, the wells should be developed prior to sampling. The objective of monitor well development is to repair damage done to the formation by the drilling operation so that the natural hydraulic properties of the formation are restored and to remove any fluids introduced into the formation that could compromise the integrity of the sample. Monitoring well development is accomplished by purging fluid from the well until the pH and specific conductivity have stabilized and turbidity has been reduced to the greatest extent possible.

4. **Sampling Procedures**

Ground water should be sampled according to OCD accepted standards or other OCD approved methods. Samples should be collected in clean containers supplied by the laboratory which will conduct the analysis or from a reliable laboratory equipment supplier. Samples for

different analyses require specific types of containers. The laboratory can provide information on the types of containers and preservatives required for sample collection. The following procedures are accepted by OCD as standard sampling procedures:

a) Monitor wells should be purged of a minimum of three well volumes of ground water using a clean bailer prior to sampling to ensure that the sample represents the quality of the ground water in the formation and not stagnant water in the well bore.

b) Collect samples in appropriate sample containers containing the appropriate preservative for the analysis required. No bubbles or headspace should remain in the sample container.

c) Label the sample containers with a unique code for each sample.

d) Cool and store samples with cold packs or on ice.

e) Promptly ship sample to the lab for analysis following chain of custody procedures.

f) All samples must be analyzed within the holding times for the laboratory analytical method specified by EPA.

5. Ground Water Laboratory Analysis

Samples should be analyzed for potential ground water contaminants contained in the waste stream, as defined by the WQCC Regulations. All ground water samples must be analyzed using EPA methods, or by other OCD approved methods and must be analyzed within the holding time specified by the method. Below are OCD accepted laboratory analytical methods for analysis of ground water samples analyzed for petroleum related constituents. Additional analyses may be required if the substance leaked, spilled or release has been anything other than a petroleum based fluid or waste.

a. <u>Analytical Methods</u>

i.) Benzene, Toluene, Ethylbenzene and Xylene

- EPA Method 602/8020

ii.) Major Cations and Anions

- Various EPA or standard methods

iii.) Heavy Metals

- EPA Method 6010, or;
- Various EPA 7000 series methods

iv.) Polynuclear Aromatic Hydrocarbons

- EPA Method 8100

VI. REMEDIATION

The following discussion summarizes recommended techniques for remediation of contaminated soil and ground water as defined in Section IV.A. and IV.B. OCD approval for remediation of an individual leak, spill or release site is not required if the company is operating under an OCD approved spill containment plan. All procedures which deviate from the companies spill containment plan must be approved by OCD.

A. SOIL REMEDIATION

When RCRA Subtitle C exempt or RCRA nonhazardous petroleum contaminated soil requires remediation, it should be remediated and managed according to the criteria described below or by other OCD approved procedures which will remove, treat, or isolate contaminants in order to protect fresh waters, public health and the environment.

In lieu of remediation, OCD may accept an assessment of risk which demonstrates that the remaining contaminants will not pose a threat to present or foreseeable beneficial use of fresh waters, public health and the environment.

1. Contaminated Soils

Highly contaminated/saturated soils and unsaturated contaminated soils exceeding the standards described in Section IV.A. should be either:

a) Excavated from the ground until a representative sample from the walls and bottom of the excavation is below the contaminant specific remediation level listed in Section IV.A.2.b or an alternate approved remediation level, or;

b) Excavated to the maximum depth and horizontal extent practicable. Upon reaching this limit a sample should be taken from the walls and bottom of the excavation to determine the remaining levels of soil contaminants, or;

c) Treated in place, as described in Section VI.A.2.b.ii. - Treatment of Soil in Place, until a representative sample is below the contaminant specific remediation level listed in Section IV.A.2.b, or an alternate approved remediation level, or;

d) Managed according to an approved alternate method.

2. Soil Management Options

All soil management options must be approved by OCD. The following is a list of options for either on-site treatment or off-site treatment and/or disposal of contaminated soils:

a. Disposal

Excavated soils may be disposed of at an off-site OCD approved or permitted facility.

b. Soil Treatment and Remediation Techniques

i. Landfarming

Onetime applications of contaminated soils may be landfarmed on location by spreading the soil in an approximately six inch lift within a bermed area. Only soils which do not contain free liquids can be landfarmed. The soils should be disced regularly to enhance biodegradation of the contaminants. If necessary, upon approval by OCD, moisture and nutrients may be added to the soil to enhance aerobic biodegradation.

In some high risk areas an impermeable liner may be required to prevent leaching of contaminants into the underlying soil.

Landfarming sites that will receive soils from more than one location are considered centralized sites and must be approved separately by the OCD prior to operation.

ii. Insitu Soil Treatment

Insitu treatment may be accomplished using vapor venting, bioremediation or other approved treatment systems.

iii. Alternate Methods

The OCD encourages alternate methods of soil remediation including, but not limited to, active soil aeration, composting, bioremediation, solidification, and thermal treatment.

B. GROUND WATER REMEDIATION

1. Remediation Requirements

Ground water remediation activities will be reviewed and approved by OCD on a case by case basis prior to commencement of remedial activities. When contaminated

ground water exceeds WQCC ground water standards, it should be remediated according to the criteria described below.

a. Free Phase Contamination

Free phase floating product should be removed from ground water through the use of skimming devices, total-fluid type pumps, or other OCD-approved methods.

b. Dissolved Phase Contamination

Ground water contaminated with dissolved phase constituents in excess of WQCC ground water standards can be remediated by either removing and treating the ground water, or treating the ground water in place. If treated waters are to be disposed of onto or below the ground surface, a discharge plan must be submitted and approved by OCD.

c. Alternate Methods

The OCD encourages other methods of ground water remediation including, but not limited to, air sparging and bioremediation. Use of alternate methods must be approved by OCD prior to implementation.

VII. TERMINATION OF REMEDIAL ACTION

Remedial action may be terminated when the criteria described below have been met:

A. SOIL

Contaminated soils requiring remediation should be remediated so that residual contaminant concentrations are below the recommended soil remediation action level for a particular site as specified in Section IV.A.2.b.

If soil action levels cannot practicably be attained, an evaluation of risk may be performed and provided to OCD for approval showing that the remaining contaminants will not pose a threat to present or foreseeable beneficial use of fresh water, public health and the environment.

B. GROUND WATER

A ground water remedial action may be terminated if all recoverable free phase product has been removed, and the concentration of the remaining dissolved phase contaminants in the ground water does not exceed New Mexico WQCC water quality standards or background levels. Termination of remedial action will be approved by OCD upon a demonstration of completion of remediation as described in above.

VIII. FINAL CLOSURE

Upon termination of any required remedial actions (Section VII.) the area of a leak, spill or release may be closed by backfilling any excavated areas, contouring to provide drainage away from the site, revegetating the area or other OCD approved methods.

IX. FINAL REPORT

Upon completion of remedial activities a final report summarizing all actions taken to mitigate environmental damage related to the leak, spill or release will be provided to OCD for approval.

APPENDIX A

A. The Division shall be notified of any fire, break, leak, spill, or blowout occurring at any injection or disposal facility or at any oil or gas drilling, producing, transporting, or processing facility in the State of New Mexico by the person operating or controlling such facility.

B. "Facility," for the purpose of this rule, shall include any oil or gas well, any injection or disposal well, and any drilling or workover well; any pipe line through which crude oil, condensate, casinghead or natural gas, or injection or disposal fluid (gaseous or liquid) is gathered, piped, or transported (including field flow-lines and lead-lines but not including natural gas distribution systems); any receiving tank, holding tank, or storage tank, or receiving and storing receptacle into which crude oil, condensate, injection or disposal fluid, or casinghead or natural gas is produced, received, or stored; any injection or disposal pumping or compression station including related equipment; any processing or refining plant in which crude oil, condensate, or casinghead or natural gas is processed or refined; and any tank or drilling pit or slush pit associated with oil or gas well or injection or disposal well drilling operations or any tank, storage pit, or pond associated with oil or gas production or processing operations or with injection or disposal operations and containing hydrocarbons or hydrocarbon waste or residue, salt water, strong caustics or strong acids, or other deleterious chemicals or harmful contaminants.

C. Notification of such fire, break, leak, spill, or blowout shall be in accordance with the provisions set forth below:

(1) Well Blowouts. Notification of well blowouts and/or fires shall be "immediate notification" described below. ("Well blowout" is defined as being loss of control over and subsequent eruption of any drilling or workover well, or the rupture of the casing, casinghead, or wellhead or any oil or gas well or injection or disposal well, whether active or inactive, accompanied by the sudden emission of fluids, gaseous or liquid, from the well.)

(2) "Major" Breaks, Spills, or Leaks. Notification of breaks, spills, or leaks of 25 or more barrels of crude oil or condensate, or 100 barrels or more of salt water, none of which reaches a watercourse or enters a stream or lake; breaks, spills, or leaks in which one or more barrels of crude oil or condensate or 25 barrels or more of salt water does reach a watercourse or enters a stream or lake; and breaks, spills, or leaks of hydrocarbons or hydrocarbon waste or residue, salt water, strong caustics or strong acids, gases, or other deleterious chemicals or harmful contaminants of any magnitude which may with reasonable probability endanger human health or result in substantial damage to property, shall be "immediate notification" described below.

(3) "Minor" Breaks, Spills, or Leaks. Notification of breaks, spills, or leaks of 5 barrels or more but less than 25 barrels of crude oil or condensate, or 25 barrels or more but less than 100 barrels of salt water, none of which reaches a watercourse or enters a stream or lake, shall be "subsequent notification" described below.

(4) "Gas Leaks and Gas Line Breaks. Notification of gas leaks from any source or of gas pipe line breaks in which natural or casinghead gas of any quantity has escaped or is escaping which may with reasonable probability endanger human health or result in substantial damage to property shall be "immediate notification" described below. Notification of gas pipe line breaks or leaks in which the loss is estimated to be 1000 or more MCF of natural or casinghead gas but in which there is no danger to human health nor of substantial damage to property shall be "subsequent notification" described below.

(5) Tank Fires. Notification of fires in tanks or other receptacles caused by lightning or any other cause, if the loss is, or it appears that the loss will be, 25 or more barrels of crude oil or condensate, or fires which may with reasonable probability endanger human health or result in substantial damage to property, shall be "immediate notification" as described below. If the loss is, or it appears that the loss will be at least 5 barrels but less than 25 barrels, notification shall be "subsequent notification" described below.

(6) Drilling Pits, Slush Pits, and Storage Pits and Ponds. Notification of breaks and spills from any drilling pit, slush pit, or storage pit or pond in which any hydrocarbon or hydrocarbon waste or residue, strong caustic or strong acid, or other deleterious chemical or harmful contaminant endangers human health or does substantial surface damage, or reaches a watercourse or enters a stream or lake in such quantity

(7) IMMEDIATE NOTIFICATION. "Immediate Notification" shall be as soon as possible after discovery and shall be either in person or by telephone to the district office of the Division district in which the incident occurs, or if the incident occurs after normal business hours, to the District Supervisor, the Oil and Gas Inspector, or the Deputy Oil and Gas Inspector. A complete written report ("Subsequent Notification") of the incident shall also be submitted in DUPLICATE to the appropriate district office of the Division within ten days after discovery of the incident.

(8) SUBSEQUENT NOTIFICATION. "Subsequent Notification" shall be a complete written report of the incident and shall be submitted in duplicate to the district office of the Division district in which the incident occurred within ten days after discovery of the incident.

(9) CONTENT OF NOTIFICATION. All reports of fires, breaks, leaks, spills, or blowouts, whether verbal or written, shall identify the location of the incident by quarter-quarter, section, township, and range, and by distance and direction from the nearest town or prominent landmark so that the exact site of the incident can be readily located on the ground. The report shall specify the nature and quantity of the loss and also the general conditions prevailing in the area, including precipitation, temperature, and soil conditions. The report shall also detail the measures that have been taken and are being taken to remedy the situation reported.

(10) WATERCOURSE, for the purpose of this rule, is defined as any lake-bed or gully, draw, stream bed, wash, arroyo, or natural or man-made channel through which water flows or has flowed.

APPENDIX B

1-203. NOTIFICATION OF DISCHARGE--REMOVAL.

A. With respect to any discharge from any facility of oil or other water contaminant, in such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property, the following notifications and corrective actions are required:

1. As soon as possible after learning of such a discharge, but in no event more than twenty-four (24) hours thereafter, any person in charge of the facility shall orally notify the Chief, Ground Water Bureau, Environmental Improvement Division, or his counterpart in any constituent agency delegated responsibility for enforcement of these rules as to any facility subject to such delegation. To the best of that person's knowledge, the following items of information shall be provided:

a. the name, address, and telephone number of the person or persons in charge of the facility, as well as of the owner and/or operator of the facility;

b. the name and address of the facility;

c. the date, time, location, and duration of the discharge;

d. the source and cause of discharge;

e. a description of the discharge, including its chemical composition;

f. the estimated volume of the discharge; and

g. any actions taken to mitigate immediate damage from the discharge.

2. When in doubt as to which agency to notify, the person in charge of the facility shall notify the Chief, Ground Water Bureau, Environmental Improvement Division. If that division does not have authority pursuant to Commission delegation, the division shall notify the appropriate constituent agency.

3. Within one week after the discharger has learned of the discharge, the facility owner and/or operator shall send written notification to the same division official, verifying the prior oral notification as to each of the foregoing items and providing any appropriate additions or corrections to the information contained in the prior oral notification.

4. The oral and written notification and reporting requirements contained in the three preceding paragraphs and the paragraphs below are not intended to be duplicative of discharge notification and reporting requirements promulgated by the Oil Conservation Commission (OCC) or by the Oil Conservation Division (OCD); therefore, any facility which is subject to OCC or OCD discharge notification and reporting requirements need not additionally comply with the nofification/and reporting requirements herein.

5. As soon as possible after learning of such a discharge, the owner/operator of the facility shall take such corrective actions as are necessary or appropriate to contain and remove or mitigate the damage caused by the discharge.

6. If it is possible to do so without unduly delaying needed corrective actions, the facility owner/operator shall endeavor to contact and consult with the Chief, Ground Water Bureau, Environmental Improvement Division or appropriate counterpart in a delegated agent, in an effort to determine the division's views as to what further corrective actions may be necessary or appropriate to the discharge in question. In any event, no later than fifteen (15) days after the discharger learns of the discharge, the facility owner/operator shall send to said Bureau Chief a written report describing any corrective actions taken and/or to be taken relative to the discharge. Upon a written request and for good cause shown, the Bureau Chief may extend the time limit beyond fifteen (15) days.

7. The Bureau Chief shall approve or disapprove in writing the foregoing corrective action report within thirty (30) days of its receipt by the division. In the event that the report is not satisfactory to the division, the Bureau Chief shall specify in writing to the facility owner/operator any shortcomings in the report or in the corrective actions already taken or proposed to be taken relative to the discharge, and shall give the facility owner/operator a reasonable and clearly specified time within which to submit a modified corrective action report. The Bureau Chief shall approve or disapprove in writing the modified corrective action report within fifteen (15) days of its receipt by the division.

8. In the event that the modified corrective action report also is unsatisfactory to the division, the facility owner/operator has five (5) days from the notification by the Bureau Chief that it is unsatisfactory to appeal to the division director. The division director shall approve or disapprove the modified corrective action report within five (5) days of receipt of the appeal from the Bureau Chief's decision. In the absence of either corrective action consistent with the approved corrective action report or with the decision of the director concerning the shortcomings of the modified corrective action report, the division may take whatever enforcement or legal action it deems necessary or appropriate.

B. Exempt from the requirements of this section are continuous or periodic discharges which are made;

1. in conformance with water quality control commission regulations and rules, regulations or orders of other state or federal agencies; or

2. in violation of water quality control commission regulations but pursuant to an assurance of discontinuance or schedule of compliance approved by the commission or one of its duly authorized constituent agencies.

C. As used in this section:

1. "discharge" means spilling, leaking, pumping, pouring, emitting, emptying, or dumping into water or in a location and manner where there is a reasonable probability that the discharged substance will reach surface or subsurface water;

2. "facility" means any structure, installation, operation, storage tank, transmission line, motor vehicle, rolling stock, or activity of any kind, whether stationary or mobile;

3. "oil" means oil of any kind or in any form including petroleum, fuel oil, sludge, oil refuse and oil mixed with wastes;

4. "operator" means the person or persons responsible for the overall operations of a facility; and

5. "owner" means the person or persons who own a facility, or part of a facility.

D. Notification of discharge received pursuant to this regulation or information obtained by the exploitation of such notification shall not be used against any such person in any criminal case, except for perjury or for giving a false statement

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

February 7, 2001

CERTIFIED MAIL
RETURN RECEIPT NO. 3771-7019

Mr. Joe Hudman
Coastal Chemical Company L.L.C.
5300 Memorial Dr.
Houston, Texas 77007

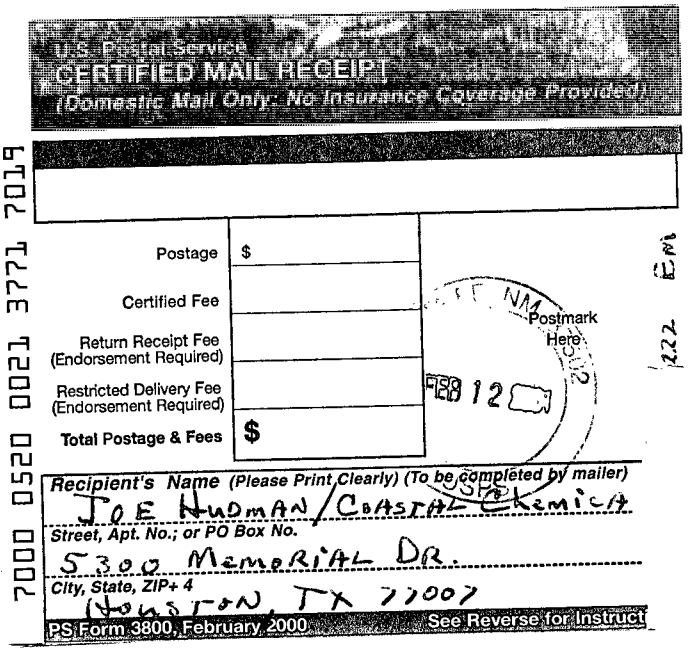
RE: Discharge Plan Renewal GW-222
Coastal Chemical Company L.L.C.
Farmington Facility
San Juan County, New Mexico

Dear Mr. Hudman:

The ground water discharge plan renewal application GW-222 for the **Coastal Chemical Company L.L.C. Farmington Facility** located in the NE/4 NE/4 of Section 24, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico, **is hereby approved** under the conditions contained in the enclosed attachment. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe office within 10 working days of receipt of this letter. Please note new mailing address below.**

The original discharge plan application was submitted on April 21, 1995 and approved October 11, 1995. The discharge plan renewal application letter, dated June 7, 2000, submitted pursuant to Section 3106 of the New Mexico Water Quality Control Commission (WQCC) Regulations also includes all earlier applications and all conditions later placed on those approvals. The discharge plan is renewed pursuant to Section 3109.C. Please note Section 3109.G, which provides for possible future amendment of the plan. Please be advised that approval of this plan does not relieve Coastal Chemical Company L.L.C. of responsibility should operations result in pollution of surface water, ground water or the environment. Nor does it relieve Coastal Chemical Company L.L.C. of its responsibility to comply with any other governmental authority's rules and regulations.

Please be advised that all exposed pits, including lined pits and open tanks (exceeding 16 feet in diameter) shall be screened, netted or otherwise rendered nonhazardous to wildlife including migratory birds.



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JOE HUDMAN / COASTAL CHEMICAL

Street, Apt. No.; or PO Box No.
5300 MEMORIAL DR.

City, State, ZIP+4
HOUSTON, TX 77007

PS Form 3800, February 2000 See Reverse for Instruct

Please note that Section 3104 of the regulations provides: "When a plan has been approved, discharges must be consistent with the terms and conditions of the plan." Pursuant to Section 3107.C, Coastal Chemical Company L.L.C. is required to notify the Director of any facility expansion, production increase or process modification that would result in any change in the discharge of water quality or volume.

Pursuant to Section 3109.H.4, this renewal plan is for a period of five years. This renewal will expire on **October 11, 2005**, and Coastal Chemical Company L.L.C. should submit an application in ample time before this date. Note that under Section 3106.F of the regulations, if a discharger submits a discharge plan renewal application at least 120 days before the discharge plan expires and is in compliance with the approved plan, then the existing discharge plan will not expire until the application for renewal has been approved or disapproved

The discharge plan renewal application for the Coastal Chemical Company L.L.C. **Farmington Facility** is subject to WQCC Regulation 3114. Every billable facility submitting a discharge plan application will be assessed a filing fee of $50.00. There is a renewal flat fee assessed for oil and gas service companies equal to one-half of the original flat fee or $690.00. The OCD has received the filing fee.

On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,

Roger C. Anderson
Chief, Environmental Bureau
Oil Conservation Division

RCA/eem
Attachment

Xc: OCD Aztec Office

ATTACHMENT TO THE DISCHARGE PLAN RENEWAL GW-222
COASTAL CHEMICAL COMPANY L.L.C.
FARMINGTON FACILITY
DISCHARGE PLAN APPROVAL CONDITIONS
February 7, 2001

1. Payment of Discharge Plan Fees: The $50.00 filing fee has been received by the OCD. There is a required flat fee equal to one-half of the original flat fee for oil and gas service companies. The renewal flat fee required for this facility is $690.00 which may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the discharge plan, with the first payment due upon receipt of this approval. All checks are to be made payable to Water Quality Management Fund and forwarded to the OCD Santa Fe Office. Please note new mailing address on letterhead.

2. Commitments: Coastal Chemical Company L.L.C. will abide by all commitments submitted in the discharge plan renewal application letter dated June 7, 2000 and these conditions for approval.

3. Waste Disposal: All wastes will be disposed of at an OCD approved facility. Only oilfield exempt wastes shall be disposed of down Class II injection wells. Non-exempt oilfield wastes that are non-hazardous may be disposed of at an OCD approved facility upon proper waste determination per 40 CFR Part 261. Any waste stream that is not listed in the discharge plan will be approved by OCD on a case-by-case basis.

4. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums will be stored on their sides with the bungs in and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets will also be stored on an impermeable pad and curb type containment.

5. Process Areas: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.

6. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new tanks or existing tanks that undergo a major modification, as determined by the Division, must be placed within an impermeable bermed enclosure.

7. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.

8. Labeling: All tanks, drums and containers will be clearly labeled to identify their contents and other emergency notification information.

9. Below Grade Tanks/Sumps: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All sumps and below-grade tanks must demonstrate integrity annually. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps, or other OCD approved methods. The OCD will be notified at least 72 hours prior to all testing.

10. Underground Process/Wastewater Lines: All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity every five (5) years. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing.

11. Class V Wells: No Class V wells that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes will be closed unless it can be demonstrated that groundwater will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD regulated facilities which inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only must be permitted by the New Mexico Environment Department.

12. Housekeeping: All systems designed for spill collection/prevention will be inspected weekly and after each storm event to ensure proper operation and to prevent overtopping or system failure. A record of inspections will be retained on site for a period of five years.

13. Spill Reporting: All spills/releases will be reported pursuant to OCD Rule 116 and WQCC 1203 to the OCD Aztec District Office.

14. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.

15. Storm Water Plan: The facility will have an approved storm water run-off plan.

16. Closure: The OCD will be notified when operations of the **Farmington Facility** are discontinued for a period in excess of six months. Prior to closure of the **Farmington Facility**, the Director will submit a closure plan for approval. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.

17. Conditions accepted by: Coastal Chemical Company L.L.C., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Coastal Chemical Company L.L.C. further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Coastal Chemical Company L.L.C.

Print Name: _____

Signature: _____

Title: _____

Date: _____

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

January 25, 2001

Lori Wrotenbery
Director
Oil Conservation Division

CERTIFIED MAIL
RETURN RECEIPT NO. 5051 0043

Mr. Michael Meredith
Coastal Chemical Company, Inc.
#10 County Road 5911
Farmington, New Mexico 87401

RE: Site Modifications Notification
GW-222, Farmington Service Facility
San Juan County, New Mexico

Dear Mr. Meredith:

The OCD has received the site modification letter, dated December 6, 2000, from Coastal Chemical Company, Inc. for the Farmington Service Facility GW-222 located in the NE/4 NE/4, Section 24, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. The requested modification is considered a minor modification to the above referenced discharge plan and public notice will not be issued. **The site modifications are approved without modification to the discharge plan with the stipulation that all modifications comply with the discharge plan renewal approved October 11, 1995.**

Please note that Section 3104 of the regulations requires that **"When a plan has been approved, discharges must be consistent with the terms and conditions of the plan."** Pursuant to Section 3107.C Coastal Chemical Company, Inc. is required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality or volume. Further, this approval does not relieve Coastal Chemical Company, Inc. from liability should operations result in contamination to the environment.

Sincerely,

Ed Martin
Environmental Bureau
Oil Conservation Division

cc: Mr. Denny Foust - Aztec District Office

U.S. Postal Service
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Name (Please Print Clearly) (To be completed by mailer)
MICHAEL MEREDITH, COASTAL CHEMICAL

Street, Apt. No.; or PO Box No.
#10 COUNTY RD. 5911

City, State, ZIP+ 4
FARMINGTON NM 87401

PS Form 3800, July 1999 See Reverse for Instructions

OIL CONSERVATION DIVISION

October 11, 1995

CERTIFIED MAIL
RETURN RECEIPT NO. Z-765-963-074

Mr. Joe Hudman, Ph. D.
Coastal Chemical, Inc.
3205 Pasadena Blvd.
Pasadena, TX 77503

RE: Approval of Discharge Plan GW-222
Coastal Chemical Inc., Farmington Facility
San Juan County, New Mexico

Dear Mr. Hudman:

The **discharge plan GW-222 for the Coastal Chemical Inc. Facility** located in NE/4 NE/4 Section 24, Township 29 North, Range 13 West, NMPM, San Juan County, New Mexico, **is hereby approved** subject to the conditions contained in the enclosed attachment. The discharge plan consists of the application and its contents dated August 23, 1995 and the additional information submitted September 29, 1995 by Coastal Chemical Inc..

The discharge plan application was submitted pursuant to Section 3-106 of the New Mexico Water Quality Control Commission Regulations. Please note Sections 3-109.E and 3-109.F which provide for possible future amendments or modifications of the plan. Please be advised that the approval of this plan does not relieve Coastal Chemical Inc. of liability should the operations associated with this facility result in pollution of surface water, ground water, or the environment.

Please be advised that all exposed pits, including lined pits and open top tanks (tanks exceeding 16 feet in diameter), shall be screened, netted, or otherwise rendered nonhazardous to wildlife including migratory birds.

Please note that Section 3-104 of the regulations requires that "When a plan has been approved, discharges must be consistent with the terms and conditions of the plan." Pursuant to Section 3-107.C you are required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality or volume.

Pursuant to Section 3-109.G.4, this plan is for a period of five (5) years. This approval will expire October 11, 2000, and you should submit an application for renewal in six (6) months before this date.

The discharge plan application for the Coastal Chemical Inc. Facility 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 dollars ($50) plus the flat fee of one thousand three-hundred and eighty dollars ($1380.00) for Service company facilities.

The $50 filing fee has been received by the OCD. The flat fee for an approved discharge plan has not been received by the OCD. The flat fee check should be submitted to the **NMED - Water Quality Management** through the NMOCD office in Santa Fe, New Mexico.

On behalf of the staff of the Oil Conservation Division, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,

William J. LeMay
Director

WJL/pws
Attachment

xc: Mr. Denny Foust , Mr. Coby Muckelroy - NMED HRMB

ATTACHMENT TO DISCHARGE PLAN GW-222 APPROVAL
Coastal Chemical Inc. - Farmington
DISCHARGE PLAN REQUIREMENTS
October 11, 1995

1. Payment of Discharge Plan Fees: The one thousand three hundred and eighty dollar ($1380) flat fee shall be submitted upon receipt of this approval. The flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the five (5) year duration of the plan, with the first payment due upon receipt of this approval.

2. Tank Berming: All tanks that contain materials other than fresh water that, if released, could contaminate surface or ground water or the environment will be bermed to contain 1 1/3 times the capacity of the tank or 1 1/3 times the volume of all interconnected tanks.

3. Drum Storage: All drums will be stored on pad and curb type containment.

4. Spills: All spills and/or leaks will be reported to the OCD district office pursuant to WQCC Rule 1-203 and OCD Rule 116.

5. Modifications: All proposed modifications that include the construction of any below grade facilities or the excavation and disposal of wastes or contaminated soils will have OCD approval prior to excavation, construction or disposal.

6. Waste Disposal:

   A. All wastes shall be disposed of at an NMOCD approved facility.

   B. Only oilfield exempt wastes can be disposed of down Class II injection wells. Non-exempt oilfield wastes that are non-hazardous by characteristics may be disposed of at an NMOCD approved facility.

   C. Contact the NMED Hazardous Waste and Radioactive Materials Bureau for hazardous waste issues at (505)-827-1558.