

GENERAL CORRESPONDENCE

YEAR(S): 2005-1995

EW₌ RECEIVED Founded 1849 NOV 2 8 2005 OIL CONSERVATION DIVISION NM OIL CONSERVATION DEPT ALTERNATE ACCOUNT: 56689 ATTO: Ed Martin AD NUMBER: 00147277 ACCOUNT: 00002212 1220 ST. FRANCIS DR P.O. #: 06-199-050125 ATT MARY ANAYA LEGAL NO: 78023 312 LINES 1 TIME(S) 174.72 SANTA FE NM 87505 AFFIDAVIT: 5.50 TAX: 13.63 TOTAL: 193.85

THE SANTA FE

AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO COUNTY OF SANTA FE

I, R. Lara, being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTA FE NEW MEXICAN, a daily newspaper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937; that the publication # 78023 a copy of which is hereto attached was published in said newspaper 1 day(s) between 11/22/2005 and 11/22/2005 and that the notice was published in the newspaper proper and not in any supplement; the first date of publication being on the 22nd day of November, 2005 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

/S/ VERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 22nd day of November, 2005

Notary <u>Laure</u>	2. Hardino	
Commission Expires:	J	11/03/07



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NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the fol-lowing discharge plan renewal application has been submitted to the Director of the Oil Conservation Divi-sion, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

(GW-235) - Mr. Jerry Tufly, BASIC ENERGY SERVICES (formerly American Energy Services), 6121 US Highway 64, Bloom-field, New Mexico 87499 has submitted 87499 has submitted an application for their BLOOMFIELD SERVICE CENTER lo-cated in the NW/4 of Section 30, Township 29 North, Range 11 West, San Juan County, New Mexico. All effluents that may be generated at the be generated at the facility will be col-lected in closed top receptacles and off-site for disposal at an OCD approved facility. Groundwater most likely to be affected by a spill, leak, or ac-cidental discharge to the surface is at a depth of approxi-mately 10 feet with a total dissolved solids concentration of approximately 200 mg/L. The discharge permit addresses how oil-field products and field products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the sur-face will be managed The OCD proposed conditions can be viewed at http://www.emnrd.st

ate.nm.us/emnrd/ocd ENV-

<u>DraftPublicEtc.</u>htm in the Draft Discharge Permit for this facility.

(GW-052) Transwestern Pipeline Com-pany, Mr. Larry Campbell, Division Environmental Scientist, 6381 North Main, Roswell, New Mexico 88201, has submitted a re-newal application for the previously

discharge proved lan for their Roswell compressor Station, lan for their Roswell compressor Station, located in the SW/4 SW/4 of Section 21, Township 9 South, Range 24 East, NMPM, Chaves County, New Mexico. Approxi-mately 1000 gallons per day of wastewaper day of wastewa-ter will be transferred to an offsite live-stock-watering tank. The wastewater has a total dissolved solids concentration about 1250 Groundwater mġ/l. most Groundwater most likely to be affected by a spill, leak or acci-dental discharge to the surface is at a depth of approxi-mately 240 feet with a total dissolved solids concentration of ap-proximately 1551 proximately 1551 mg/l. The discharge plan addresses how spills, leaks and other accidental discharges to the surface will be managed. The OCD proposed conditions can be viewed at http://www.emnrd.st ate.nm.us/emnrd/ocd /ENV-

DraftPublicEtc.htm in the Draft Discharge Permit for this facilitv.

Any interested person may obtain further in-formation from the Oll Conservation Divi-sion and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address be-tween 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any pro-posed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publica-tion of this notice during which comments may be submitted to him and public hear-ing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disap-prove the proposed plan based on information available. If a mation available. If a public hearing is held, the director will ap-prove or disapprove the proposed plan based on information in the plan and infor-mation submitted at the hearing.

GIVEN under the of New Mexico Conservation C CO mission at Santa Fe, New Mexico, on this 17th day of November 2005.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

SEAL

MARK FEISMIER, P.E., Director Legal #78023 Pub. November 22. 2005

AFFIDAVIT OF PUBLICATION

Ad No. 52581

STATE OF NEW MEXICO County of San Juan:

CONNIE PRUITT, being duly sworn says: That she is the ADVERTISING MANAGER of THE DAILY TIMES, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES, a daily newspaper duly qualified for the purpose within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for publication and appeared in the Internet at The Daily Times web site on the following day(s):

Tuesday, November 22, 2005.

document.

And the cost of the publication is \$95.49.

ON $\frac{1}{2900}$ CONNIE PRUITT appeared before me, whom I know personally to be the person who signed the above

Comprission Expires November

COPY OF PUBLICATION

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Legals

NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan renewal application has been submitted to the Director of the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

(GW-235) – Mr. Jerry Tufly, BASIC ENERGY SERVICES (formerly American Energy Services), 6121 US Highway 64, Bloomfield, New Mexico 87499 has submitfed an application for their BLOOMFIELD SERVICE CENTER located in the NW/4 of Section 30, Township 29 North, Range 11 West, San Juan County, New Mexico. All effluents that may be generated at the facility will be collected in closed top receptacles and transported off-site for disposal at an OCD approved facility. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 10 feet with a total dissolved solids concentration of approximately 200 mg/L. The discharge permit addresses how oilfield products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed. The OCD proposed conditions can be viewed at <u>http://www.emnrd.state.nm.us/emnrd/ocd/ENV-DraftPublicEtc.htm</u> in the Draft Discharge Permit for this facility.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 17th day of November 2005.

> STATE OF NEW MEXICO OIL CONSERVATION DIVISION

SEAL

918

MARK FEISMIER, P.E., Director

Legal No. 52581 published in The Daily Times, Farmington, New Mexico on Tuesday, November 22, 2005.



November 15, 2005

Dear Mr. Ford,

Due to our recent and on going growth, we had to build an additional building which will be one quarter office space and three quarters shop space. The new building will be built to the west of our existing office building, and west of our existing shop. The one building will facilitate both office and shop, the north end being the office area and the south end being shop.

REC

OIL CONS

ATION

At this point this is the only expansion being done to our facility. I will attach a modified facility diagram as well.

Thank you,

Zachary Mangum

P.O. Box 2783, Farmington, NM 87499, 6121 US Hwy 64, Bloomfield, NM 87413 Phone: 877.634.0113, Fax: 505.634.0114 web: www.basicenergyservices.com







- 1. Office
- 2. Shop
- Chemical & Fuel Storage
 Parts Storage

Legend: Property Line _____ Fence -.

NOT DRAWN TO SCALE



NEW MEXICO ENERGY, MENERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON Governor Joanna Prukop Cabinet Secretary

October 20, 2005

Mark E. Fesmire, P.E. Director Oil Conservation Division

Mr. Jerry Tufly Basic Energy Services 6121 US Highway 64 Bloomfield, New Mexico 87499

RE: Discharge Permit Renewal GW-225 Basic Energy Services Bloomfield Service Facility San Juan County, New Mexico

Dear Mr. Tufly:

The ground water discharge permit renewal application GW-225 for the Basic Energy Services Bloomfield Service Facility located in the NW/4 NE/4 of Section 30, Township 29 North, Range 11 West, 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 30 days of receipt of this letter.

The original discharge permit application was submitted on September 8, 1995 and approved October 30, 1995. The discharge permit renewal application, dated October 7, 2005, submitted pursuant to 20 NMAC 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 permit is approved pursuant to 20 NMAC 3109.A. and 3109.C. Please note 20 NMAC 3109.E. and 20 NMAC 3109.F, provides for possible future amendment of the permit. Please be advised that approval of this plan does not relieve Basic Energy Services of liability should operations result in pollution of surface water, ground water, or the environment.

Please be advised that all exposed pits, including lined pits and open tanks (tanks exceeding 16 feet in diameter), shall be screened, netted, or otherwise rendered nonhazardous to wildlife including migratory birds.

Please note that 20 NMAC 3104 of the regulations provides: "When a permit has been approved, discharges must be consistent with the terms and conditions of the permit." Pursuant to 20 NMAC 3107.C., Basic Energy Services 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.

Oil Conservation Division * 1220 South St. Francis Drive * Santa Fe, New Mexico 87505 Phone: (505) 476-3440 * Fax (505) 476-3462 * <u>http://www.emnrd.state.nm.us</u> Mr. Jerry Tufly GW-225 Bloomfield Service Facility October 20, 2005 Page 2

Pursuant to 20 NMAC 3109.G.4., this renewal permit is for a period of five years. This renewal will expire on **October 30, 2010**, and Basic Energy Services should submit an application in ample time before this date. Note that under 20 NMAC 3106.F. of the regulations, if a discharger 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. It should be noted that all discharge permit facilities will be required to submit the results of an underground drainage testing program as a requirement for discharge permit .

The discharge permit renewal application for the Basic Energy Services Bloomfield Service Facility is subject to WQCC Regulation 3114. Every billable facility submitting a discharge permit application will be assessed a fee equal to the filing fee of \$100.00. There is a renewal flat fee assessed for oil field service company facilities equal to \$1,700.00. 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 permit review.

Sincerely,

Roger C. Anderson Chief, Environmental Bureau Oil Conservation Division

RCA/wjf Attachment

xc: OCD Aztec District Office

ATTACHMENT TO THE DISCHARGE PERMIT RENEWAL GW-225 BASIC ENERGY SERVICES BLOOMFIELD SERVICE FACILITY DISCHARGE PERMIT APPROVAL CONDITIONS (October 20, 2005)

- 1. <u>Payment of Discharge permit Fees:</u> The \$100.00 filing fee has been received by the OCD. There is a required flat fee equal to \$1,700.00 for oil field service companies. The renewal flat fee required for this facility may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the discharge permit, with the first payment due upon receipt of this approval.
- 2. <u>Basic Energy Services Commitments:</u> Basic Energy Services will abide by all commitments submitted in the discharge permit renewal application dated October 7, 2005 and these conditions for approval.
- 3. <u>Waste Disposal</u>: 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.
- 4. <u>Drum Storage:</u> 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. <u>Process Areas:</u> 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. <u>Above Ground Tanks:</u> 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. <u>Above Ground Saddle Tanks</u>: 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. <u>Labeling:</u> All tanks, drums and containers will be clearly labeled to identify their contents and other emergency notification information.

Page 1 of 3

<u>Below Grade Tanks/Sumps:</u> 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 pre-existing sumps and below-grade tanks must demonstrate integrity on an annual basis. Integrity tests include 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. <u>Underground Process/Wastewater Lines:</u> All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity every 5 years. The permittee 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. <u>Class V Wells</u>: 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. <u>Housekeeping:</u> 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. <u>Spill Reporting:</u> All spills/releases will be reported pursuant to OCD Rule 116 and WQCC 1203 to the OCD Aztec District Office.

14. <u>Transfer of Discharge permit:</u> The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge permit. A written commitment to comply with the terms and conditions of the previously approved discharge permit must be submitted by the purchaser and approved by the OCD prior to transfer.

15. <u>Storm Water Plan:</u> Basic Energy Services shall maintain storm water runoff controls. As a result of Basic Energy Services's operations any water contaminant that exceeds the WQCC standards listed in 20 NMAC 6.2.3101 is discharged in any storm water runoff then Basic Energy Services shall notify the OCD within 24 hours, modify the plan within 15 days and submit for OCD approval. Basic Energy Services shall also take immediate corrective actions pursuant to Item 12 of these conditions.

Page 2 of 3

9.

- 16. <u>Closure:</u> The OCD will be notified when operations of the Bloomfield Service Facility are discontinued for a period in excess of six months. Prior to closure of the Bloomfield Service Facility a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.
- 17. <u>Certification:</u> Basic Energy Services, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Basic Energy Services 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.

Accepted:

BASIC ENERGY SERVICES

by_____

Title



ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

I hereby acknowledge receipt of check No. dated or cash received on _____ in the amount of \$ 100.00 from Operating Lo. for GW-235 Submitted by: Date: 10-12-Submitted to ASD by: Data: Received in ASD by: Data: Filing Fee / New Facility ____ Renewal / Modification ____ Other Organization Code <u>521.07</u> Applicable Fy <u>2001</u> To be deposited in the Water Quality Management Fund. Full Payment ____ or Annual Increment _ WELLS FARGO BANK WEST, N.A. 970-243-1611 • 359 MAIN ST. **ENERGY AIR OPERATING, LLC** GRAND JUNCTION, CO 81501 P.O. BOX 1866 23-7/1020 GRAND JUNCTION, CO 81502 (970) 241-6029 DATE \$ 100-PAY One-kundred dollars ~ "/100 ORDER State of MM Energy Menerals and Natural Resources ß



State of New Mexico Energy Minerals and Natural Resources

Re: Discharge Plan Application for Renewal

Enclosed is a Discharge Renewal plan for Basic Energy Services, formally Energy Air Drilling. All attachments required for this form are put together with our Renewal form. Also included is an additional copy and the original.

If you have any questions and/or concerns please contact me at (505-634-0113), or Jerry Tufly, Vice President at (505-634-0113).

Sincerely,

Zachary Mangum

P.O. Box 2783, Farmington, NM 87499, 6121 U5 Hwy 64, Bloomfield, NM 87413 Phone: 877.634.0113, Fax: 505.634.0114

<u>District I</u> 1625 N. French Dr., Hobbs, NM 8824 <u>District II</u> 1301 W. Grand Avenue, Artesia, NM <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM	OState of Ne88210Energy Minerals and410Oil Conservat87505Santa Fe, N	w Mexico Natural Resources ion Division Francis Dr, JM 87505	Revised June 10, 2003 Submit Original Plus 1 Copy to Santa Fe 1 Copy to Appropriate District Office
DISCHARGE PLA REFINE	IN APPLICATION FOR SI ERIES, COMPRESSOR, G AND CRUDE OIL PU er to the OCD Guidelines for assistan	ERVICE COMPANII EOTHERMAL FACI MP STATIONS ce in completing the applicat	ES,GAS PLANTS, LITES
	🗌 New 🖾 Renewal	Modification	
1. Type: ΟΙL δ	GAS - AIR DRILLING AND WOR	KOVER RIG SERVICE COM	PANY
2. Operator:BASIC	ENERGY SERVICES		
Address: 6121 Contact Person: JERRY	US HWY 64, BLOOMFIELD, NM	(PHYSICAL) PO BOX 2783 (MA Phone: 505-6	, FARMINGTON, NM 87499 MILING) 534-0113
3. Location:	/4/4: Section30 Submit large scale topographic r	Township 29 nap showing exact location.	Range 11
4. Attach the name, telepho	one number and address of the landou	wner of the facility site.	
5. Attach the description of	f the facility with a diagram indicatin	g location of fences, pits, dik	es and tanks on the facility.
6. Attach a description of a	Il materials stored or used at the faci	lity.	
7. Attach a description of p must be included.	resent sources of effluent and waste	solids. Average quality and a	laily volume of waste water
8. Attach a description of c	urrent liquid and solid waste collecti	on/treatment/disposal proced	ures.
9. Attach a description of p	roposed modifications to existing co	llection/treatment/disposal sy	stems.
10. Attach a routine inspect	ion and maintenance plan to ensure p	ermit compliance.	
11. Attach a contingency pla	an for reporting and clean-up of spill	s or releases.	
12. Attach geological/hvdro	logical information for the facility.	Depth to and quality of groun	d water must be included.
 Attach a facility closure rules, regulations and/or 	plan, and other information as is nec	essary to demonstrate compl	iance with any other OCD
14. CERTIFICATIONI he best of my knowledge and	reby certify that the information subbelief.	mitted with this application is	s true and correct to the
Name: <u>Jera</u> ld R. Tuf	1y	Title: Vice President.	Southern Rocky Mtn. Divi
Signature: <u>Au</u>	P. Un	Date: _October 07. 20	05
E-mail Address: Jerry.I	ufly@basicenergyservices.co	m	





ATTACHMENT 4 LANDOWNER

Tufly Development CO, LLC (505) 325-8569 345 Canyon View Circle Farmington NM 87401



NOT DRAWN TO SCALE



1	ATTACHMENT 6				
Product Name	Solid (S)	Description	Packaging	Maximum	Location
	Liquid (L)			Volumes	Facility Diagram
F-450	L	DRILLING FOAMER	55 G. DRUM	550.GALLONS	3
F-485	1 L	DRILLING FOAMER	55 G. DRUM	550 GALLONS	. 3
DC-310	L L	CORROSION INHIBITER	55 G. DRUM	275 GALLONS	3
DC-308	L .	CORROSION INHIBITER	55 G. DRUM	275 GALLONS	3
POLYMER	L	POLYMER	5 G. BUCKETS	25 GALLONS	3
SHALE T.	Ľ	SHALE TREATMENT	55 G. DRUM	110 GALLONS	3
					/ •
FRAILYS	L	DIESEL	500 G. TANK	500 GALLONS	3
N/A	L	USED OIL	500 G. TANK	500 GALLONS	3
SAFETY KLEEN	L	PARTS WASHER	35 G. DRUM	35GALLONS	2
CHEVRON	· L · ·	ANTIFREEZE	55 G. DRUM	110 GALLONS -	283
CHEVRON	· · · L	15-40 OIL	55 G. DRUM	110 GALLONS	3
MOBIL/ CHEVRON	L	SYNTHETIC OIL	55 G. DRUM	110 GALLONS	3
CHEVRON	L	ATF OIL	55 G. DRUM	110 GALLONS	3
CHEVRON	L	30W OIL	55 G. DRUM	110 GALLONS	- 3

ATTACHMENT 7 EFFLUENT AND WASTE SOLIDS

Minimum wastewater is derived from isolated cleaning situations. At times, cleaning vehicles and equipment is necessary. The average amount of water used on a daily basis if four gallons. The majority of our equipment is cleaned at the well site or at one of the large truck washes in the area.

Safety-Kleen disposes of our parts washing fluid, used filters, oil absorbent pads and used oil. We place are used oil filters and absorbent pads into a three cubic yard isolated container. Safety-Kleen then empties our filled container and puts the empty container back.

Emptied drums are returned to our vendors for deposits.

Emptied paint containers are dried and thrown away. Then, they are sent to the landfill.

ATTACHMENT 8 LIQUID & SOLID WASTE COLLECTION/TREATMENT/DISPOSAL

Used oil is stored in a 500-gallon tank (location #3 on facility diagram).once capacity is ³/₄ full; Safety-Kleen is contacted for removal.

Used oil and fuel filters are placed into a three cubic yard isolated container provided by Safety-Kleen (location #7 on facility diagram). Safety-Kleen then comes by monthly to empty the container.

Empty oil and chemical drums are stored (location #5 on facility diagram) until they can be returned to vendors for deposit credit and /or recycled through their recycling programs.

ATTACHMENT 9 MODIFICATIONS TO COLLECTION/TREATMENT/DISPOSAL

Due to the growth of the Basic Energy Services we may have to make our containment and storage area larger. This will be done so we can handle and facilitate our products correctly.

No modifications to our existing collection/treatment/disposal systems are planned (at this time).

ATTACHMENT 10 ROUTINE INSPECTION AND MAINTNANCE PLAN

Frequency of inspections:

- 1. Daily Routine
- 2. Semi-Annually
- 3. Annually

Daily:

Inspecting the integrity of stored barrels, fuel tanks, and all other liquid storage containers will be conducted. A competent person will conduct the daily inspections. The competent person will be a designated shop employee.

The designated shop employee will record the daily inspections. If a potential leak is identified, the designated employee will immediately inform Basic Energy Services management. The outcome of the potential leak inspection will be recorded.

Semi-Annually:

All valving and piping will be inspected. When necessary, replacement will occur.

Annually:

All pumps will be cleaned and inspected with written documentation.

ATTACHMENT 11 CONTINGENCY PALN

REPORTING:

If a spill or release occurs, the following personal are designated as primary and secondary responders by the Company's Safety, Health, and Environmental Coordinator.

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Primary: Al Walker, Area Manger

Telephone (505) Office: 634-0113 Cell: 330-2963 Pager: 564-5536

Primary: John Reed, Rig Manager	Cell: 320-0117 Pager: 564-5540
Secondary: Kenny Baumgardner, Field Supervisor	Cell: 330-0934 Pager: 564-5537
Secondary: JaBen Mangum, Field Supervisor	Cell: 330-6298 Pager: 564-5579
Secondary: Tomas Marquez, Rig Field Supervisor	Cell: 486-5781 Pager: 564-5588
Gary Lee Goff, (HSE) Safety Representative	Cell: 330-3130
Zachary Mangum, Assets/ Safety	Cell: 486-5245 Pager: 564-5583

1

The primary will be contacted immediately if a major spill or release occurs. The primary will notify the local OCD director and call for emergency clean up.

> Environmental Cleanup- 24Hr. Response Envirotech Telephone (505) 632-0615 Farmington, NM

Spill Containment and Clean-up:

- 1. Absorbent material
- 2. Shovel
- 3. Disposable plastic

If a spill occurs at the location where drums, tanks, or other liquid storage containers are stored, there is secondary containment in place. See attachment 5.

2

ATTACHMENT 12 GEOLOGICAL/HYDROLOGICAL

This site is located within the alluvial deposition area of the San Juan River. The property is the end of a minor ridge located approximately 200 feet above and one half mile north of the existing river channel. The soil is patchy and thin with most of the site predominately by unconsolidated sand, gravel and rock mix.

Source: RMI Environmental Services, Inc. 1998

ATTACHMENT 13 FACILITY CLOSURE PLAN

Should the time come that Basic Energy Services would need to leave our current facility, we would contact the local OCD office and follow any OCD rules and regulations governing proper closure procedures.



NEW DEXICO ENERGY, MENERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON Governor Joanna Prukop Cabinet Secretary

April 4, 2005

Mark E. Fesmire, P.E. Director Oil Conservation Division

Mr. Harold Haro American Energy Services P.O. Box 3120 Midland, Texas 79702

RE: Discharge Permit Renewal Notice for American Energy Services Facilities

Dear Mr. Haro:

American Energy Services has the following discharge permit that expires on the date shown below.

GW-235 expires 6/26/2005 – Farmington Service Facility

WQCC 3106.F. If the holder of an approved discharge permit submits an application for discharge permit renewal at least 120 days before the discharge permit expires, and the discharger is not in violation of the approved discharge permit on the date of its expiration, then the existing approved discharge permit for the same activity shall not expire until the application for renewal has been approved or disapproved. A discharge permit continued under this provision remains fully effective and enforceable. An application for discharge permit renewal must include and adequately address all of the information necessary for evaluation of a new discharge permit. Previously submitted materials may be included by reference provided they are current, readily available to the secretary and sufficiently identified to be retrieved. [12-1-95]

The discharge permit renewal application for the above facility is subject to WQCC Regulation 3114. Every billable facility submitting a discharge permit renewal will be assessed a fee equal to the filing fee of \$100.00 plus a flat fee for oil field service facilities. The \$100.00 filing fee is submitted with the discharge permit renewal application and is nonrefundable.

Mr. Harold Haro American Energy Services Company April 4, 2005 Page 2

Please make check payable to: **NMED-Water Quality Management** and addressed to the OCD Santa Fe Office. Please submit the original discharge permit renewal application and one copy to the OCD Santa Fe Office and one copy to the OCD Aztec District Office. Note that the completed and signed application form must be submitted with your discharge permit renewal request. (Copies of the WQCC regulations and discharge permit application form and guidelines are available on OCD's website at <u>www.emnrd.state.nm.us/ocd/</u>).

If the above facility no longer has any actual or potential discharges and a discharge permit is not needed, please notify this office. If the American Energy Services has any questions, please do not hesitate to contact me at (505) 476-3489.

Sincerely,

m

W. Jack Ford, C.P.G. Oil Conservation Division

cc: OCD Aztec District Office

ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

	· .
I hereby acknowledge recei	pt of check No. dated /2-7-00,
or cash received on	in the amount of \$ 1,380,00
from American Energy	Services
for Farmington Facil	lite (44)-235.
Submitted by:///	Hack · Date: 12-15-00
Submitted to ASD by:	Date:
Received in ASD by:	Date:
Filing Fee New	Facility Renewal
Modification Ot	her
To be deposited in the Wate Full Payment <u>/</u> or	er Quality Management Fund. Annual Increment
AMERICAN ENERGY SERVICES, INC. P.O. BOX 3120 (915) 570-4899	BANK ONE, TEXAS, NA-No. 72428 32-61 2301 West Wall 1110 Midland, Texas 79701
MIDLAND, TX 79701	CONTROL 1270772000 NUMBER \$*** AMOUNT 1270772000 NUMBER
One Thousand Three Hundred Eighty and 00 PAY	/100 US Doll
NMED-Water Quality Management c/o Oil Conservation Division TO THE 2040 South Pacheco ORDER Santa Fe, NM 87505 OF	AUTHORIZED SIGNATURE

OUR REF.	YOUR INVOICE	INVOICE DATE	INVOICE AMOUNT	AMOUNT PAID	DISCOUNT TAKEN	NET CHECK AMOUNT
055431	Discharge F	lan Fee	1380.00 S GW-23	1380.00	0.00	1380.00

4

AMERICAN ENERGY SERVICES, INC.

Date:December 21, 2005Time:9:45 amSubject:GW-225

Called Jerald Tufly (505) 634-0113 and left message. Told him that discharge permit had expired and that they needed to submit a renewal application.



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON Governor Jennifer A. Salisbury Cabinet Secretary Lori Wrotenbery Director Oil Conservation Division

September 18, 2000

CERTIFIED MAIL RETURN RECEIPT NO. 5050 9887

Mr. Jerald R. Tufly Energy Air Drilling Service Company P.O. Box 2783 Farmington, New Mexico 87499

RE: Discharge Plan Renewal GW-225 Energy Air Drilling Service Company Farmington Service Facility San Juan County, New Mexico

Dear Mr. Tufly:

The ground water discharge plan renewal application GW-225 for the Energy Air Drilling Service Company Farmington Service Facility located in the NW/4 NE/4 of Section 30, Township 29 North, Range 11 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.

The original discharge plan application was submitted on September 8, 1995 and approved October 30, 1995. The discharge plan renewal application, dated May 2, 2000, submitted pursuant to Sections 5101.B.3. 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 Sections 5101.A. and 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 Energy Air Drilling Service Company of liability should operations result in pollution of surface water, ground water, or the environment.

Please be advised that all exposed pits, including lined pits and open tanks (tanks exceeding 16 feet in diameter), shall be screened, netted, or otherwise rendered nonhazardous to wildlife including migratory birds.

Mr. Jerald R. Tufly GW-225 Farmington Service Facility September 18, 2000 Page 2

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., Energy Air Drilling Service Company 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 30, 2005**, and Energy Air Drilling Service Company 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. It should be noted that all discharge plan facilities will be required to submit the results of an underground drainage testing program as a requirement for discharge plan .

Energy Air Drilling Service Company will submit a storm water run-off plan for approval by the OCD within six (6) months of the date of this approval letter for the Farmington Service Facility facility.

The discharge plan renewal application for the Energy Air Drilling Service Company Farmington Service Facility is subject to WQCC Regulation 3114. Every billable facility submitting a discharge plan application will be assessed a fee equal to the filing fee of \$50. There is a renewal flat fee assessed for oil field service company equal to one-half of the original flat fee or \$690.00. The OCD has received the filing fee.

Please make all checks payable to: Water Management Quality Management Fund C/o: Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505. Mr. Jerald R. Tufly GW-225 Farmington Service Facility September 18, 2000 Page 3

If you have any questions please contact Mr. W. Jack Ford at (505) 827-7156. 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/wjf Attachment

xc: OCD Aztec Office


ATTACHMENT TO THE DISCHARGE PLAN RENEWAL GW-225 ENERGY AIR DRILLING SERVICE COMPANY FARMINGTON SERVICE FACILITY DISCHARGE PLAN APPROVAL CONDITIONS (September 18, 2000)

- 1. <u>Payment of Discharge Plan Fees:</u> 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 field service companies. The renewal flat fee required for this facility is \$690.00 which can be paid in full at the time the discharge plan is approved or in equal annual installments with the first installment due at the time of approval of the discharge plan.
- 2. <u>Energy Air Drilling Service Company Commitments:</u> Energy Air Drilling Service Company will abide by all commitments submitted in the discharge plan renewal application letter dated May 2, 2000 and these conditions for approval.
- 3. <u>Waste Disposal</u>: 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. <u>Drum Storage:</u> 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. <u>Process Areas:</u> 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. <u>Above Ground Tanks</u>: 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. <u>Above Ground Saddle Tanks</u>: 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.

Page 1 of 3

- 8. <u>Labeling:</u> All tanks, drums and containers will be clearly labeled to identify their contents and other emergency notification information.
- 9. <u>Below Grade Tanks/Sumps:</u> 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 pre-existing sumps and below-grade tanks must demonstrate integrity on an annual basis. Integrity tests include 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. <u>Underground Process/Wastewater Lines:</u> All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity every 5 years. The permittee 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. <u>Class V Wells</u>: 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. <u>Housekeeping:</u> 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. <u>Spill Reporting:</u> All spills/releases will be reported pursuant to OCD Rule 116 and WQCC 1203 to the OCD Hobbs District Office.
- 14. <u>Transfer of Discharge Plan:</u> 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. <u>Storm Water Plan:</u> The facility will have an approved storm water run-off plan.

- 16. <u>Closure:</u> The OCD will be notified when operations of the Farmington Service Facility are discontinued for a period in excess of six months. Prior to closure of the Farmington Service Facility a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.
- 17. <u>Certification:</u> Energy Air Drilling Service Company, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Energy Air Drilling Service Company 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.

Accepted:

ENERGY AIR DRILLING SERVICE COMPANY

by

Title



THE SANTA FE EW I MEXICA Founded 1849

.11 18

NM OIL CONSERVATION DIVISION ATTN: DONNA DOMINGUEZ 2040 S. PACHECO ST. SANTA FE, NM 87505

AD NUMBER: 159284 ACCOUNT: 56689 LEGAL NO: 67724 P.O.#: 00199000278 175 LINES 1 time(s) at \$ 77.14 AFFIDAVITS: 5.25 TAX: 5.15 TOTAL: 87.54

AFFIDAVIT OF PUBLICATION

NOTICE OF PUBLICATION

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION .

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

(GW-225) - Energy Air Drilling Company, Mr. Jeraid Tufly, P.O. Box 2783, Farmington, New Mexico 87499-2783, has submitted a discharge plan re-newal application for their Farmington service facility located in the NW/4 NE/4, Section 30, Town-ship 29 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 4 gallons per day of wastewater may be generated at the facility will be collected in a closed top container and transported offsite to an OCD approved disposal facility. Groundwater most likely to be affected by an accidental discharge is at a depth ranging from 40 to 80 feet with a total dissolved solids concen-trations of approximately 1100 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The I, Bruner discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after comments may be submitted to him and a public by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

obtain further information from the Oil Conservation

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 5th day of July 2000.

STATE OF NEW MEXICO OIL CONSERVATION **DIVISION** LORI WROTENBERY, Director

Legal #67724 Pub. July 17, 2000 STATE OF NEW MEXICO COUNTY OF SANTA FE

being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTA FE NEW MEXICAN, a daily newspaper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a Newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937; that the publication a copy of which is hereto attached was published #67724 the date of publication of in said newspaper 1 day(s) between 07/17/2000 and this notice during which 07/17/2000 and that the notice was published in the newspaper proper and not in any supplement; the first hearing may be requested publication being on the 17 day of July, 2000 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

/S/ LEGAL ADVERINISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 17 day of July A.D., 2000

Jaura 2. 1turding 11/23/03 Notary

Commission Expires



NOTICE OF PUBLICATION

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

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(GW-225) - Energy Air Drilling Company, Mr. Jerald Tufly, P.O. Box 2783, Farmington, New Mexico 87499-2783, has submitted a discharge plan renewal application for their Farmington service facility located in the NW/4 NE/4, Section 30, Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 4 gallons per day of waste water may be generated at the facility will be collected in a closed top container and transported offsite to an OCD approved disposal facility. Groundwater most likely to be affected by an accidental discharge is at a depth ranging from 40 to 80 feet with a total dissolved solids concentrations of approximately 1100 mg/l. The discharge plan addresses how spill, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held.

A hearing will be held if the director determines that there is significant public interest. If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 5th day of July 2000.

> STATE OF NEW MEXICO OIL CONSERVATION DIVISION

LORI WROTENBERY, Director

SEAL



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON Governor Jennifer A. Salisbury Cabinet Secretary

July 3, 2000

Lori Wrotenbery Director Oil Conservation Division

CERTIFIED MAIL RETURN RECEIPT NO. 5050 9702

Mr. Gary Goff Energy Air Drilling Service Co. P.O. Box 2783 Farmington, New Mexico 87499-2783

RE: Former Energy Air Drilling Service Co. Facility Closure of 5633 U.S. Highway 64 San Juan County, New Mexico

Dear Mr. Goff:

The New Mexico Oil Conservation Division (OCD) has received and reviewed the closure information dated June 12, 2000 from Energy Air Drilling Service Co. The closure information was submitted subsequent to an inspection by Mr. Denny Foust of the OCD Aztec District Office. In response to instructions provided you by Mr. Foust all contaminated soils were excavated and transported offsite to an OCD approved disposal facility.

Based upon the content of the closure information provided, the OCD hereby approves of the closure of the former Energy Air Drilling Services Co.'s facility located at 5633 U.S. Highway 64, Farmington, New Mexico.

Please note, OCD approval does not relieve Energy Air Drilling Co. from liability should it latter be found that contamination exists beyond the scope of the closure information provided. Further, OCD approval does not relieve Energy Air Drilling Co. from compliance with any other federal, state, and local rules and regulations that may apply.

If you have any questions please contact Mr. W. Jack Ford at (505)-827-7156.

Sincerely,

Roger C. Anderson Environmental Bureau Chief

RCA/wjf

Cc: Mr. Denny Foust, New Mexico Oil Conservation Division Aztec District Office.

ACXNOWLEDGEMENT OF RECEIPT OF CHECK/CASH
I hereby acknowledge receipt of check No dated $5/1/\sigma_0$,
or cash received on in the amount of \$ 50.00
from Energy Air Drilling Service Co.
for Farmington Facility GW-255.
Submitted by: MM Tack Date: 5-5-00
Submitted to ASD by:Date:
Received in ASD by:Date:
Filing Fee V New Facility Renewal
Modification Other
Organization Code <u>52/.07</u> Applicable FY <u>2000</u>
To be deposited in the Water Quality Management Fund.
Full Payment or Annual Increment

ENERGY AIR DRILLING SERVICE CO.

P.O. BOX 1866 (970) 241-6029 GRAND JUNCTION, CO 81502 NORWEST BANK GRAND JUNCTION (970) 243-1611 + 359 MAIN ST. GRAND JUNCTION, CO 81501



23-7/1020

DATE MAY 1, 2000 5*\$50.00*

PAY

TO THE TROER

. F

*FIFTY AND NO/00'S DOLLARS**

NMED – WATER QUALITY MANAGEMENT 2040 S PACHECO SANTA FE NM 87505

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- <u>*</u>			· · · · · · · · · · · · · · · · · · ·
FILING FEE 6121 US HWY 64	GL #695.5	\$50.00	

ENERGY AIR DRILLING SERVICE CO.

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May 2, 2000

New Mexico Energy, Minerals & Natural Resources Department

Mr. Jack Ford Oil Conservation Division 2040 S. Pacheco Santa Fe, NM 87505

Dear Mr. Ford,

Please find enclosed the following:

- 1. Closure plan for Energy Air Drilling Service Company's yard at 5633 U.S. Hwy 64, Farmington, NM.(GW-255)
- 2. Discharge Plan Application for Energy Air Drilling Service Company's yard at 6121 U.S. Hwy 64, Bloomfield, NM.(Original Discharge Plan plus one copy. One copy mail to OCD Aztec District Office.)
- 3. Check number 028522 for \$ 50.00 filing fee.

If you require any additional information, please contact me at (505) 634-0113.

Sincerely,

Jerald R. Tufly Energy Air Drilling Service Co. PO Box 2783 Farmington, NM 87499-2783

2466 Industrial Blvd. • P.O. Box 1866 • Grand Junction, CO 81502-1866 • (970) 241-6029 • FAX: (970) 241-6808



May 2, 2000

New Mexico Energy, Minerals & Natural Resources Department

Mr. Jack Ford Oil Conservation Division 2040 S. Pacheco Santa Fe, NM 87505

Re: Closure of Discharge Plan GW-225

Energy Air Drilling Service Co.(SW/4 SE/4 Section 20, Township 29 North, Range 12 West) Farmington Facility San Juan County, New Mexico

Dear Mr. Ford,

Energy Air Drilling Service Co. has moved to a new location. The previous location was too small. E.A.D.S. was unable to negotiate additional space or a purchase of the property from the landlord.

From the date of our approved Discharge Plan GW-225 (October 30, 1995) until our moving February 1, 1999, there were no spills or leaks of our stored chemicals, diesel, or lubricants.

Before moving, all the diesel fuel and used oil was removed by our venders. The holding tanks were moved with **no** fluids in them. Our chemical inventory was depleted and our new inventory was delivered to our new address.

If you require any additional information, please contact me at (505) 634-0113.

Sincerely,

Jerald R. Tufly Energy Air Drilling Service Co. PO Box 2783 Farmington, NM 87499-2783

2466 Industrial Blvd. • P.O. Box 1866 • Grand Junction, CO 81502-1866 • (970) 241-6029 • FAX: (970) 241-6808

6121 US Hwy 64 • P.O. Box 2783 • Farmington, NM 87499-2783 • (505) 634-0113 • FAX: (505) 634-0114

District I 1625 N. French Dr., Hobbs, NM 88240	State of New Mexic Energy Minerals and Natural Resources
District 11 811 South First, Artesia, NM 88210 District 111 1000 Pio Brazos Road, Artes, NM 87410	Oil Conservation Division 2040 South Pacheco Santa Fe, NM 87505
District IV 2040 South Pacheco, Santa Fe, NM 87505	Banta i C, 14141 07505

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

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

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

	New 🗌 Renewal 🗍 Modification				
1.	Type: <u>Oil and Gas - Air Drilling Service Company</u>				
2.	Operator: Energy Air Drilling Service Company				
	Address: 6121 U.S. Hwy 64 Bloomfield NM. (PO Box 2783 Farmington NM 87499)				
	Contact Person: Jerry Tufly or Al Walker Phone: (505) 634-0113				
3.	Location:/4/4 Section 30 Township 29 Range 11 Submit large scale topographic map showing exact location.				
4.	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.	CERTIFICATION				
	I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.				
	Name: Jerald R. Tufly Title: President				
	Signature: Ceull up Date: 05/02/00				





,



ENERGY AIR DRILLING SERVICE CO. (970) 241-6029 PO Box 1866 Grand Junction, CO 81502-1866



ATTACHMENT Va #3 CHEMICAL & FUEL STORAGE DIAGRAM

.



- 1. EARTHEN & 30 MIL. CONTAINMENT
- 2. LOADING DOCK OILS & CHEMICALS
- 3. 500 GALLON USED OIL
- 4. <u>2/500 GALLON DIESEL FUEL</u>
- 5. EMPTY DRUM STORAGE
- 6. <u>500+ GALLON STOCK TANKS</u> (SECONDARY CONTAINMENT)
- 7. <u>DRIP TRAY</u>

NOT DRAWN TO SCALE

		ATTACHM	ENT V	'	
Product Name	Solid (S)	Description	Packaging	Maximum	Location
	Liquid (L)			Volumes	Facility Dia.
F-450	L	Drilling Foamer	55 g. drum	550 gallons	3
F-485	L	Drilling Foamer	55 g. drum	220 gallons	3
EADS IOI	L	Drilling Foamer	55 g. drum	220 gallons	3
DC-306	L	Corrosion Inhibitor	55 g. drum	110 gallons	3
Shale Trol	L	Shale Stabilizer	55 g. drum	220 gallons	3
KCL-1	L	KCL Substitute	55 g. drum	110 gallons	3
DV-1100	L	Polymer	05 g. pails	50 gallons	3
Shell	L	# 2 Diesel Fuel	2/500 g. tanks	1000 gallons	3
N/A	L	Used Oil	500 g. tank	500 gallons	3
Shell	L	Donax TG Fluid	55 g.drum	55 gallons	3
Shell	L	Rotella T Oil 30wt	55 g.drum	55 gallons	3
Shell	L	Rotella T Oil 40wt	55 g.drum	55 gallons	3
Shell	L	Rotella T Oil 15 - 40wt	55 g.drum	55 gallons	3
Shell	L	Shellzone antifreeze	55 g.drum	55 gallons	2&3
Mobil	L	Rarus 826	55 g.drum	55 gallons	3
Mobil	L	Rarus 827	55 g.drum	55 gallons	3
Safety Kleen	L	Solvent / parts washer	35 g.drum	35 gallons	2

ATTACHMENT VII EFFLUENT AND WASTE SOLIDS

Minimum wastewater is derived from isolated cleaning situations. At times, cleaning vehicles and equipment is necessary. The average amount of water used on a daily basis if four gallons. The majority of our equipment is cleaned at the well site or at one of the large truck washes in the area.

Safety Kleen disposes of our parts washing fluid, crushed filters (fuel and oil), and used oil. We use a filter crusher that removes 95% of the free oil. Crushed filters are placed in a 35-gallon sealed drum. Safety Kleen removes the filled drum.

Emptied drums are returned to our vendors for deposits.

Emptied paint containers are dried and crushed. Then, they are sent to the landfill.

ATTACHMENT VIII LIQUID & SOLID WASTE COLLECTION/TREATMENT/DISPOSAL

Used oil is stored in a 500-gallon tank (location #3 on facility diagram). Once capacity is ³/₄ full, Safety Kleen Corp. is contacted for removal.

Used oil and fuel filters are crushed, removing 95% of the free oil or fuel. Crushed filters are placed in sealed 35-gallon drums (location #2 on facility diagram). Once drums are full, Safety Kleen Corp. is contacted for removal.

Empty oil and chemical drums are stored (location #3 on facility diagram) until they can be returned to venders for deposit credit and/or recycled through their recycling programs.

ATTACHMENT IX MODIFICATIONS TO COLLECTION/TREATMENT/DISPOSAL

No modifications to our existing collection/treatment/disposal systems are planned.

ATTACHMENT X ROUTINE INSPECTION AND MAINTENANCE PLAN

Frequency of Inspections:

- I. Daily Routine
- II. Semi-Annually
- III. Annually

Daily:

Inspecting the integrity of stored barrels, fuel tanks, and all other liquid storage containers will be conducted. A competent person will conduct the daily inspections. The competent person will be a designated shop employee.

The designated shop employee will record the daily inspections. If a potential leak is identified, the designated employee will immediately inform Energy Air Drilling's management. The outcome of the potential leak inspection will be recorded.

Semi-Annually:

All valving and piping will be inspected. When necessary, replacement will occur.

Annually:

All pumps will be cleaned and inspected with written documentation.

ATTACHMENT XI CONTINGENCY PLAN

REPORTING:

If a spill or release occurs, the following personnel are designated as primary and secondary responders by the Company's Safety, Health, and Environmental Coordinator.

Personnel		<u>Telephone (505)</u>	
Primary: Al Walker, Area Manager		Home: 327-7702	
		Mobile: 330-2963	
		Pager: 324-2502	
Secondary: Kenny Baumgardner, Field Supervisor		Home: 334-8636	
	-	Mobile: 330-0934	
		Pager: 326-2449	
Gary Lee Goff, S,H, & E Coordinator	Office: (8	800) 962-7642	
-	Home: (970) 244-8936		

The primary will be contacted immediately if a major spill or release occurs. The primary will notify the local OCD director and call for emergency clean-up.

> Environmental Cleanup – 24 Hr. Response Envirotec Tele. (505) 632-0615, Farmington, NM

SPILL CONTAINMENT and CLEAN-IP:

- 1. Absorbent material
- 2. Shovel
- 3. Disposable plastic

If a spill occurs at the location where drums, tanks, or other liquid storage containers are stored, there is secondary containment in place. See Attachment V.



This site is located within the alluvial deposition area of the San Juan River. The property is the end of a minor ridge located approximately 200 feet above and one half mile north of the existing river channel. The soil is patchy and thin with most of the site predominately covered by unconsolidated sand, gravel and rock mix.

Source: RMI Environmental Services, Inc. 1998



Should the time come that Energy Air Drilling Service Co. would need to leave our current facility, we would contact the local OCD office and follow any OCD rules and regulations governing proper closure procedures.



May 2, 2000

New Mexico Energy, Minerals & Natural Resources Department

Mr. Jack Ford Oil Conservation Division 2040 S. Pacheco Santa Fe, NM 87505

Re: Closure of Discharge Plan GW-225

Energy Air Drilling Service Co.(SW/4 SE/4 Section 20, Township 29 North, Range 12 West) Farmington Facility San Juan County, New Mexico

Dear Mr. Ford,

Energy Air Drilling Service Co. has moved to a new location. The previous location was too small. E.A.D.S. was unable to negotiate additional space or a purchase of the property from the landlord.

From the date of our approved Discharge Plan GW-225 (October 30, 1995) until our moving February 1, 1999, there were no spills or leaks of our stored chemicals, diesel, or lubricants.

Before moving, all the diesel fuel and used oil was removed by our venders. The holding tanks were moved with **no** fluids in them. Our chemical inventory was depleted and our new inventory was delivered to our new address.

If you require any additional information, please contact me at (505) 634-0113.

Sincerely,

Jerald R. Tufly Energy Air Drilling Service Co. PO Box 2783 Farmington, NM 87499-2783

cc: OCD Aztec District Office, Mr. Denny Foust

2466 Industrial Blvd. • P.O. Box 1866 • Grand Junction, CO 81502-1866 • (970) 241-6029 • FAX: (970) 241-6808



June 14, 2000

New Mexico Energy, Minerals & Natural Resources Department

Mr. Jack Ford Oil Conservation Division 2040 S. Pacheco Santa Fe, New Mexico 87505

Dear Mr. Ford,

This letter provides the information you requested on May 15, 2000.

1. Attachment VII: Describe in detail how the wash water described in your application is handled, stored and disposal procedures for such waters.

Although our washing requirements are minimal, Energy Air Drilling has decided not to wash any equipment at our business address. As Energy Air Drilling previously stated; washing is done in the field or at one of the nearby truck washes.

At this time, Energy Air Drilling Service realizes to be efficient environmental stewards, the Company needs to implement an effectively designed, self-contained, ecologically compatible, complete washing system. Because of the cost incurred for such a system, Energy Air Drilling realizes at this time, all washing will be stopped at our business address.

2. Attachment XII: Provide the depth to ground water and quality of the ground water (TDS) under the site.

According to Steve Hayden, Geologist, OCD Aztec office, he and Denny Foust studied charts and maps then decided upon the correct information that applies to Attachment XII. The depth of ground water is 40 feet to 80 feet respectively. The quality of the ground water in relation to the San Juan river is normal condition.

Mr. Ford, I hope this required information sufficiently answers your request.

Sincerely,

Gary Lee Goff, Regional Manager--Safety, Health & Environmental cc: Denny Foust, OCD Aztec, NM Office

2466 Industrial Blvd. • P.O. Box 1866 • Grand Junction, CO 81502-1866 • (970) 241-6029 • FAX: (970) 241-6808

ENERGY AIR DRILLING SERVICE CO

May 2, 2000

New Mexico Energy, Minerals & Natural Resources Department

Mr. Jack Ford Oil Conservation Division 2040 S. Pacheco Santa Fe, NM 87505

Re: Closure of Discharge Plan GW-225

Energy Air Drilling Service Co.(SW/4 SE/4 Section 20, Township 29 North, Range 12 West) Farmington Facility San Juan County, New Mexico

Dear Mr. Ford,

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From the date of our approved Discharge Plan GW-225 (October 30, 1995) until our moving February 1, 1999, there were no spills or leaks of our stored chemicals, diesel, or lubricants.

Before moving, all the diesel fuel and used oil was removed by our venders. The holding tanks were moved with **no** fluids in them. Our chemical inventory was depleted and our new inventory was delivered to our new address.

If you require any additional information, please contact me at (505) 634-0113.

Sincerely,

Jerald R. Tufly Energy Air Drilling Service Co. PO Box 2783 Farmington, NM 87499-2783

6121 US Hwy 64 • P.O. Box 2783 • Farmington, NM 87499-2783 • (505) 634-0113 • FAX: (505) 634-0114



June 12, 2000

New Mexico Energy, Minerals & Natural Resources Department

Mr. Jack Ford Oil Conservation Division 2040 S. Pacheco Santa Fe, New Mexico 87505

Dear Mr. Ford,

JUN 21

This report pertains to the property facility closure at 5633 U.S. Hwy. 64, Farmington, New Mexico 87401, February 1, 1999.

On Tuesday, May 30, 2000, Jerry Tufly, President, Energy Air Drilling Service (EADS), Denny Foust, OCD, and myself made an assessment of the aforementioned address. Small stains of hydrocarbon content were identified. Denny Foust determined the corrective action to be taken. Soil remediation was to be completed by July 1, 2000. Denny Foust instructed EADS how to proceed with the most effective method.

On June 7th, Jerry Tufly and Earl Lang, landlord, met at the site. Earl Lang provided a backhoe for excavating the contaminated area. The enclosed pictures will lead you through the process.

- A. Pictures11and12 show a shadow from the south side of the building. The south side is the only place on the site that required soil remediation work.
- B. Picture13 shows the first pass with the backhoe exposing the depth of contamination. While EADS occupied the location, spills were minimal. When a small spill occurred, the spill was attended to promptly. However, as you can see, a large quantity had accumulated over time. Obviously, the previous occupant ignored spill clean up. Mr. Ford, I am sure with your experience you have previously encountered similar situations.
- C. Picture15 shows the deepest accumulation. The backhoe continued digging past the 20 plus inches.
- D. Pictures19& 20 show the excavation next to the building.
- E. Pictures 23 and 24 show per Denny Foust's instructions, the excavated soil spread over a substantial area to aerate. The soil appears dark because there was additional normal moisture.

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F. Picture 25 shows the clean fill dirt (approximately 10 yds.). The clean dirt was mixed with the excavated soil. The remaining clean soil filled the excavated area.

In summary, the remediation work was completed in an effective and efficient process. The small quantity of excavated contamination will aerate. The hydrocarbon content will reduce to an acceptable level.

Mr. Ford, I believe you will agree, Energy Air Drilling Service Co. has demonstrated a honest, good faith effort in cooperating with the New Mexico Energy, Minerals & Natural Resources Department (Oil Conservation Division).

Energy Air Drilling has appreciated your guidance and Denny Foust's direction.

Respectfully,

any Lee ;

Gary Lee Goff, Regional Manager--Safety, Health, & Environmental cc: Denny Foust, OCD Aztec, NM Office




















OIL CONSERVATION DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

]	May 15, 2000 Domestic Wall Only: No Consumate Coverage Provided)
<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT NO. 5050 9559</u>	Article Sentition
Mr. Jerald R. Tufly Energy Air Drilling Co. P.O. Box 2783 Farmington, New Mexico 87499-2783	Return Receipt Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required) Total Postage & Fees UMame (Places Print Clastry) (To be completed by meller)
RE: GW-255 Farmington Service Fac San Juan County, New Mexico	cility Street, Apt. No.; or PO Box No. City, State, ZIP+4 Car Mington GW - 255

Dear Mr. Tufly:

The OCD is in receipt of the renewal application for the GW-255 discharge plan at the Energy Air Drilling Co. Farmington facility. There is additional information required for the OCD to fully evaluate the application for approval. Kindly furnish the following information:

- 1. Attachment VII: Describe in detail how the washwater described in your application is handled, stored and disposal procedures for such waters;
- 2. Attachment XII: Provide the depth to ground water and quality of the ground water (TDS) under the site.

This discharge plan will be effective at your new location, however, the OCD does not have a closure plan or notice of move from your previous facility located in the SW/4 SE/4 of Section 20, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. Provide the OCD with a closure plan for this location. Send one copy to the OCD Santa Fe office and one copy to the OCD Aztec District office, Attention: Mr. Denny Foust. Until such time as OCD can appove a closure on this site the discharge plan GW-255 will cover both sites and Energy Air Drilling Co. will be responsible for any adverse impact to public health or the environment at both sites. The closure plan will be submitted within 15 days of receipt of this notice.

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If you have any questions contact me at (505) 827-7156.

Sincerely,

W. Jack Ford, C.P.G. Oil Conservation Division

cc: OCD Aztec District Office, Mr. Denny Foust



NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

Jennifer A. Salisbury CABINET SECRETARY

Oil Conservation Div. Environmental Bureau 2040 S. Pacheco Santa Fe, NM 87505

March 15, 2000

CERTIFIED MAIL RETURN RECEIPT NO. 5050 9382

Mr. Jerry Tufly Energy Air Drilling Service Co. P.O. Box 2783 Farmington, New Mexico 87499-2783

RE: Discharge Plan Renewal Notice for Energy Air Drilling Service Co. Facility

Dear Mr. Tufly:

Energy Air Drilling Service Co. has the following discharge plan which expires during the current calendar year.

GW-225 expires 10/30/2000 – Farmington Service Facility

WQCC 3106.F. If the holder of an approved discharge plan submits an application for discharge plan renewal at least 120 days before the discharge plan expires, and the discharger is not in violation of the approved discharge plan on the date of its expiration, then the existing approved discharge plan for the same activity shall not expire until the application for renewal has been approved or disapproved. A discharge plan continued under this provision remains fully effective and enforceable. An application for discharge plan renewal must include and adequately address all of the information necessary for evaluation of a new discharge plan. Previously submitted materials may be included by reference provided they are current, readily available to the secretary and sufficiently identified to be retrieved. [12-1-95]

The discharge plan renewal application for each of the above facilities is subject to WQCC Regulation 3114. Every billable facility submitting a discharge plan renewal will be assessed a fee equal to the filing fee of \$50.00 plus a flat fee equal to one-half of the original flat fee for oil field service company facilities. The \$50.00 filing fee is to be submitted with the discharge plan renewal application and is nonrefundable.

Please make all checks payable to: NMED-Water Quality Management and addressed to the OCD Santa Fe Office. Please submit the original discharge plan renewal application and one copy to the OCD Santa Fe Office and one copy to the OCD Aztec District Office. Note that the completed and signed application form must be submitted with your discharge plan renewal request. (A copy of the discharge plan application form is enclosed to aid you in preparing the renewal application. A complete copy of the regulations is available on OCD's website at <u>www.emnrd.state.nm.us/ocd/</u>).

Mr. Jerry Tufly March 15, 2000 Page 2

If the above sited facility no longer has any actual or potential discharges and a discharge plan is not needed, please notify this office. If the Energy Air Drilling Service Co. has any questions, please do not hesitate to contact me at (505) 827-7152.

Sincerely,

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Roger C. Anderson Oil Conservation Division

cc: OCD Aztec District Office

	U.S. Postal Service COVER State Coverage Provided).
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ЧH	Street, Apt. No.; or PO Box No.
705	City, State, ZIP+4 Farmington GLU-225
	PS Form 3800. July 1999

ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

I hereby acknowledge receipt o	of check No dated 10/13/94
or cash received on	in the amount of \$ 276.00
from Energy air I	Julling
for Farmington	
Submitted by:	» Date:
Submitted to ASD by: Ro	Date: 10/30/98
Received in ASD by:	Date:
Filing Fee New Fac	ility Renewal
Modification Other	
Organization Code <u>521.07</u>	Applicable FY <u>99</u>
To be deposited in the Water (Quality Management Fund.
Full Payment or A	nnual Increment X
ENERGY AIR DRILLING SERVICE CO. P.O. BOX 1866 (970) 241-6029 GRAND JUNCTION, CO 81502	NORWEST BANK GRAND JUNCTION [970] 243-1611 • 359 MAIN ST. GRAND JUNCTION, CO 81501 CHECK NUMBER 82-40/1021
PAY THE SUM Two Hundred Seventy Six.and C	DATE 10-13-98 \$ *******276.0 00/100
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ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASE ۰,

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	for Farmington	6w225
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ENERGY AIR DRILLING SERVICE CO.

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ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASE

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cor farmington face	Rity GW-225
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Submitted to ASD by: R.C.	Date: 10/20/97
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THE SUM 276 Dollars and 00 Cents	08-13-97 \$ *******276.00
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TO THE ORDER OF

PAY

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ENERGY AIR DRILLING SERVICE CO.

ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

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NMED WATER QUALITY MANAGEMENT 2040 S PACHECO SANTE FE, NM 87505

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ENERGY AIR DRILLING SERVICE CO.

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ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH I hereby acknowledge receipt of check No. dated 12 or cash received on in the amount of \$ 276.0 from for (Testiny New (19 Na.) Submitted by: Date: Submitted to ASD by: Data: Received in ASD by: Date: Filing Fee New Facility Renewal Modification Other Organization Code 521.0 Applicable FY To be deposited in the Water Quality Management Fund. Full Payment or Annual Increment NORWEST BANK GRAND JUNCTION ENERGY AIR DRILLING SERVICE CO. (970) 243-1611 + 359 MAIN ST. CHECK GRAND JUNCTION, CO 81501 P.O. BOX 1866 (970) 241-6029 NUMBER GRAND JUNCTION, CO 81502 82-40/1021 DATE 12-21-95 ****276.00 \$ THE SUM 276 Dollars and 00 Cents PAY NMED WATER QUALITY MANAGEMENT 2040 S PACHECO TO THE SANTE FE, NM 87505 ORDER OF. DATE NACHMENT DESCREPTION AMOUNT nter NET ACCOUNT



ENERGY AIR DRILLING SERVICE CO.

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ENERGY AN ORILING SERVICE CO

October 18, 1995



New Mexico Energy Minerals and Natural Resources Dept. Oil Conservation Division P.O. Box 6429 Santa Fe, NM 87505-6429 Attn: Mr. Patricio W. Sanchez

RE: Discharge Plan GW-225, Energy Air Drilling Service Co., Farmington facility, San Juan County, New Mexico.

Dear Mr. Sanchez,

Please find enclosed two copies of the additional information required for the submission of Energy Air Drilling Service Company's Discharge Plan. An additional copy has been sent to the Aztec, New Mexico Oil Conservation Division, Attn. Mr. Denny Foust.

Also find enclosed our check number 015896 for fifty dollars for the filing fee.

Sincerely,

Jerald R. Tufly Area Manager - EADS Farmington

cc Mr. Denny Foust

2466 Industrial Blvd. • P.O. Box 10: 6 • Grand Junction, CO 81502-1866 • (303) 241-6029 • FAX; (303) 241-6808

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ENERGY AIR DRILLING SERVICE CO.

NEW MEXICO ENERGY, MMERALS AND NATURAL RE OURCES DEPARTMENT

OIL CONSERVATION DIVISION

October 30, 1995

CERTIFIED MAIL RETURN RECEIPT NO. Z-765-963-089

Mr. Jerry Tufly Energy Air Drilling Service Co. P.O. Box 2783 Farmington, NM 87499-2783

RE: Approval of Discharge Plan GW-225 Energy Air Drilling Service Co., Farmington Facility San Juan County, New Mexico

Dear Mr. Tufly:

The discharge plan GW-225 for the Energy Air Drilling Service Co. Facility located in SW/4 SE/4 Section 20, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico, is liereby approved subject to the conditions contained in the enclosed attachment. The discharge plan consists of the application and its contents dated September 8, 1995 and subsequent letter of clarification dated October 18, 1995 from Energy Air Drilling Service Co.

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 Energy Air Drilling Service Co. 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.

OFFICE OF THE SECRETARY + P. O. BOX 6429 - SANTA FL, NM 87505-6429 - (505) 827-5950 ADMINISTRATIVE SERVICES DIVISION - P. O. BOX 6429 - SANTA FL, NM 87505-6429 - (505) 827-5955 ENERGY CONSERVATION AND MANACEMENT DIVISION - P. O. BOX 6429 - SANTA FL, NM 87505-6429 - (505) 827-5900 FORESTRY AND RESOURCES CONSERVATION DIVISION - P. O. BOX 0429 - SANTA FL, NM 87505-6429 - (505) 827-5830 MINING AND MINERALS DIVISION - P. O. BOX 6429 - SANTA FL, NM 87505-6429 - (505) 827-5970 OIL CONSERVATION DIVISION - P. O. BOX 6429 - SANTA FL, NM 87505-6429 - (505) 827-5970 OIL CONSERVATION DIVISION - P. O. BOX 6429 - SANTA FL, NM 87505-6429 - (505) 827-7970 OIL CONSERVATION DIVISION - P. O. BOX 6429 - SANTA FL, NM 87505-6429 - (505) 827-711 PARK AND RECREATION DIVISION - P. O. BOX 1147 - SANTA FL, NM 87504-1147 - (505) 827-7465



Page 2

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 30, 2000, and you should submit an application for renewal in six (6) months before this date.

The discharge plan application for the Energy Air Drilling Service Co. 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. LeN Director

WJL/pws Attachment Z 765 963 089



Receipt for Certified Mail No legarance Coverage Provided Do not use for International Mail

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xc: Mr. Denny Foust

Mr. Jerry Tufly Energy Air Drilling Service Co. October 30, 1995 Page 3

ATTACHMENT TO DISCHARGE PLAN GW-225 APPROVAL Energy Air Drilling Service Co. - Farmington DISCHARGE PLAN REQUIREMENTS October 30, 1995

- 1. <u>Payment of Discharge Plan Fees</u>: 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. <u>Tank Berming</u>: 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. <u>Drum Storage</u>: All drums will be stored on pad and curb type containment.
- 4. <u>Spills</u>: All spills and/or leaks will be reported to the OCD district office pursuant to WQCC Rule 1-203 and OCD Rule 116.
- 5. <u>Modifications</u>: 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. All modifications shall be approved by the NMOCD Santa Fe Office.
- 6. <u>Waste Disposal</u>:
 - 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.

Pat Sanchez

From:	Denny Foust	
To:	Pat Sanchez	
Subject:	RE: ENERGY AIR DRILLING GW-225	- ADDITIONAL INFO.
Date:	Tuesday, October 24, 1995 9:16AM	

GUIDELINES FOR PIT CONSTRUCTION ARE IMPRACTICAL FOR THIS DISCHARGE PLAN. GUIDELINES FOR BELOW GRADE TANKS DON'T REALLY APPLY AS LEAK DETECTION WILL BE REQUIRED FOR TANK OFF OF PROPOSED WASH PAD. SIZE OF WASHED PAD CLOSED TANK WAY TOO SMALL--RECYCLING SYSTEM IF POSSIBLE, DISPOSAL AT CITY SEWAGE SYSTEM, TESTING FOR KNOWLEDGE OF PROCESS MAY BE WARRANTED. REPORTING OF SPILLS TO OCD MAY NEED TO BE FURTHER CLARIFIED.

From: Pat Sanchez To: Denny Foust Subject: ENERGY AIR DRILLING GW-225 - ADDITIONAL INFO. Date: Monday, October 23, 1995 9:42AM Priority: High

Denny, If you have any comments regarding the additional information that was submitted by Energy air dated October 18, 1995 let me know by Thursday October 26, 1995. I will then draft up approval letter for Mr. LeMays sign-off- Thanks!



October 18, 1995



New Mexico Energy Minerals and Natural Resources Dept. Oil Conservation Division P.O. Box 6429 Santa Fe, NM 87505-6429 Attn: Mr. Patricio W. Sanchez

RE: Discharge Plan GW-225, Energy Air Drilling Service Co., Farmington facility, San Juan County, New Mexico.

Dear Mr. Sanchez,

Please find enclosed two copies of the additional information required for the submission of Energy Air Drilling Service Company's Discharge Plan. An additional copy has been sent to the Aztec, New Mexico Oil Conservation Division, Attn. Mr. Denny Foust.

Also find enclosed our check number 015896 for fifty dollars for the filing fee.

Sincerely,

Jerald R. Tufly Area Manager - EADS Farmington

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Environmental Bureau Oil Conservation Division

cc Mr. Denny Foust

E	NERGY AIR DRILLING SERVICE CO. P.O. BOX 1866 (970) 241-6 GRAND JUNCTION, CO 81502	NORWEST BANK GRAND JUNCTION (970) 243-1611 359 MAIN ST GRAND JUNCTION, CO 8150 82-40/1021	CHECK NUMBER
ΡΑΥ		DATE 10/18/95	\$ 50.00
	FIFTY DOLLARS AND NO/100		
TO THE ORDER OF	NMED WATER QUALITY MANAGEMENT c/o OCD 2040 S. PACHECO SANTA FE, NM 87505	Du	AUTHORIZED SIGNATURE

ENERGY AIR DRILLING SERVICE CO.

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ATTACHMENT IX :

A re-enforced concrete wash pad sloped so that wash water would drain to a 500 to 1000 gallon containment tank with secondary containment. Approximate dimensions for this pad are 20'x40' and would be located off the southwest end of the shop. This wash pad would be completed in 3 to 4 years and location could change depending on local building and zoning codes.

As stated before the waste water from the wash pad would be collected in a 500 to 1000 gallon closed tank, most of the volumes used would be lost to evaporation, but should volumes become to high wash water would be suctioned off and disposed of at a proper disposal site.

A re-enforced concrete pad with a secondary containment lip and sloped to a central collection point, would be built adjacent to the current storage for diesel fuel 500 gallon taxed, 500 gallon non-taxed and 500 gallon used oil storage.

All the above are subject to local building and zoning code approval and land lord approval.

Plans for the wash pad will be based on N.M.O.C.D. guidelines for construction of a wash area, and plans will be reviewed and approved by local O.C.D. office before construction starts.

Please see attached page for proposed locations.

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ENGINEERING DESIGN GUIDELINES FOR CONSTRUCTION OF WASTE STORAGE/DISPOSAL PONDS

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(Revised 10-90)

NEW MEXICO OIL CONSERVATION DIVISION STATE LAND OFFICE BUILDING P. O. Box 2088 SANTA FE, NEW MEXICO 87504-2088



OCT 2 3 1995

Environmental Bureau Oil Conservation Division

PREFACE

A

The following specifications shall be used as a guide to the engineering design of lined or unlined surface impoundments for waste storage/disposal at facilities regulated by the Oil Conservation Division. All plans and specifications shall be submitted to and approved by the Oil Conservation Division prior to construction. Designs may deviate from the following specifications if it can be shown that the design integrity is such that the construction of the impoundment will not affect any present or future sources of protectable ground water. Please note that this guide does not take precedence over any specifications outlined in the Oil Conservation Commission's Order No. 3221-C for centralized surface waste storage/disposal facilities in locations affected by that order. This guide does take precedence for commercial surface waste disposal facilities. These specifications do not apply to well-site produced water or reserve pits.

If any levee to be constructed is more than ten feet (10') in height from ground level, or if a pit volume is more than 10 acre-feet, the State Engineer Office must also review and issue a permit for construction of the pit.

(NOTE: The engineering guidelines presented here do not address inspection and maintenance, contingency plan submittal or other Division requirements regarding operation of surface impoundments.)

ENGINEERING DESIGN GUIDELINES FOR CONSTRUCTION OF WASTE STORAGE/DISPOSAL PONDS

- 1. Provide technical data on the design elements of each surface impoundment including the type and volume of effluent stored, area, volume, depth, slope of pond sides, sub-grade description, liner type and thickness, compatibility of liner and effluent, installation methods, leak detection methods, freeboard, and runoff/runon protection. Engineering designs must be submitted to OCD for approval prior to construction.
- 2. General Construction Requirements
 - a. Location

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Liquid and solids disposal pits and ponds shall not be located in any watercourse, lakebed, sink-hole, or other depression. Pits and ponds adjacent to any such watercourse or depression shall be located safely above the high-water level of such watercourse or depression.

- b. Design and Construction
 - (1) Evaporation ponds shall be designed and constructed to provide the minimum evaporative surface area needed for the maximum yearly volume of liquid to be discharged to the pond. This design parameter shall be based upon local climatological data. Such data and calculations used for the pond design shall be submitted with any proposed plans and specifications. Special care should be taken when calculating the pond volume to account for the decrease in the evaporation rate during the winter months.
 - (2) The design freeboard allowance shall take wave action into account to prevent overtopping due to wave action. A determination of the wave type (breaking or nonbreaking) shall be made to determine the forces acting upon the levee. Such calculations shall be submitted with the details for pond construction. Liner markings or some other device shall be installed to accurately measure freeboard.
 - (3) The pond is to be constructed so that the inside grade of the levee is no steeper than 2:1. Levees shall have an outside grade no steeper than 3:1 (see Figure 1).

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(4) The top of the levees shall be level and shall be at least eighteen inches (18") wide.

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- (5) An aeration system may be required to be constructed to prevent anaerobic conditions from forming in a pond. The necessity for this requirement will be determined individually based on pond design specifications submitted.
- (6) Upon completion of construction "as-built" completion diagrams certified by a registered professional engineer shall be submitted including locations and top-of-pipe elevation of monitor wells, if required.
- c. Synthetically Lined Evaporation Ponds
 - (1) Materials
 - (a) Synthetic materials used for lining evaporation ponds shall be impermeable and may be rigid, semi-rigid, or flexible.
 - (b) If rigid or semi-rigid materials are used, leak proof expansion joints shall be provided, or the material shall be of sufficient thickness and strength to withstand (without cracking) expansion, contraction, and settling movements in the underlying earth.
 - (c) If flexible membrane materials are used, they shall be of at least 30 mil thickness and shall have good resistance to tears or punctures.
 - (d) All materials used for lining evaporation ponds shall be resistant to hydrocarbons, salts, and acidic and alkaline solutions. The liners shall also be resistant to ultraviolet light or provision made to protect the material from the sun, as specified in Section (3) (f).
 - (e) Synthetically lined pits shall incorporate a double liner system with a leak detection system installed between the primary (top) and secondary (bottom) liner.
 - (2) Leak Detection System
 - (a) A leak detection system of an approved design shall be installed

between the primary and secondary liner. The appropriate OCD district office should be notified at least 24 hours in advance of the scheduled installation of the primary liner to afford the opportunity for a Division representative to inspect the leak detection system.

- (b) Leak detection systems may consist of, but are not necessarily limited to, approved fail-safe electric detection system or drainage and sump systems.
- (c) If an electric grid detection system is used, provision must be made for adequately testing all components to ensure the system remains functional.
- (d) If the drainage and sump system is to be used, a network of slotted or perforated drainage pipes shall be installed between the primary and secondary liners. The network shall be of sufficient density so that no point in the pond bed is more than twenty feet (20') from such drainage pipe or lateral thereof. The material placed between the pipes and laterals shall be sufficiently permeable to allow transport of the fluids to the drainage pipe. The slope for all drainage lines and laterals shall be at least six inches (6") per fifty feet (50'). The slope of the pond bed shall also conform to these values to assure fluid flow towards the leak detection system. The drainage pipe shall convey any fluids to a corrosion-proof sump located outside the perimeter of the pond (see Figure 2).
- (3) Preparation of Pond Bed for Installation of Liners

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- (a) The bed of the pond and inside grade of the levee shall be smooth and compacted, free of holes, rocks, stumps, clods, or any other debris which may rupture the liner. In extremely rocky areas, it will probably be necessary to cover the pond bed with a compacted layer of sand or other suitable materials.
- (b) A trench shall be excavated on the top of the levee the entire perimeter of the pond for the purpose of anchoring flexible liners. This trench shall be located a minimum of nine inches (9") from the slope break and shall be a minimum of twelve inches (12") deep. (See Figure 3).
- (c) The liner shall rest smoothly on the pond bed and the inner

face of the levees, and shall be of sufficient size to extend down to the bottom of the anchor trench and come back out a minimum of two inches (2") from the trench on the side furthest from the pond. (See Figure 3). In locations where temperature variations are significant, wrinkles or folds shall be placed at each corner of the pond to allow for the contraction and expansion of the membrane due to temperature variations. The membrane manufacturer should be consulted on this matter. 2.

- (d) Certain conditions require the venting of gas that may accumulate beneath a liner. If organic matter exists in the soils under the liner, or if natural gas is present in the region, gas production is likely. When a fluctuating water table is present immediately below the pond bottom, pockets of are may also accumulate below the liner. The net result of gas or air accumulation below the liner may be the "floating" of the liner to the pond surface. Two possible vent designs are illustrated in Figure 4. The need to vent this accumulated gas can be accomplished by providing a uniform layer of sand (which less than 5% will pass the 200 sieve) or a geotextile beneath the liners. To achieve the best results from either of these media, the slope from the lowest point of the pond to the toe of the dike must be at least 2%. The venting medium is carried across the entire bottom and up the side slopes. Vents should be located approximately one foot (1') down from the crown of the dike. (See Figure 3)
- (e) An anchor of used pipe or other similar material shall be placed over the liner in the anchor trench and the trench backfilled. The anchor trench shall extend the entire perimeter of the pond.
- (f) If the lining material used for the primary liner is not sunresistant, at least one inch (1") of sand or other suitable material shall be spread uniformly to cover the liner over the floor of the pit. Gravel or other wave-resistant material with sufficient angle of repose to remain in place shall be used to cover the sloping inner wall of the levee. A geotextile liner shall be placed beneath any gravel layer to provide protection for the membranae liner. Any gravel or sand layers used to protect the membranae liner from the sun shall extend to the anchor trench.
- (g) Any sand or gravel layers placed on top of a membranae liner shall be done in such a manner that the risk of tearing the liner is minimized.
- (h) At any point of discharge into the pond, no fluid force shall be directed toward the liner.
- d. Clay Lined Ponds

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(1) Materials

Clay liners will be constructed of compacted clay soils or a mixture of bentonite and soil such that a maximum water permeability of 1.0 x 10^{-7} cm/s is achieved. The application rate for bentonite to soil should be based on laboratory tests. In the absence of laboratory data, a minimum of 6 lbs. of bentonite must be thoroughly mixed with each cubic feet of soil prior to compaction.

(2) Design and Construction

In addition to requirements of Section 2.b above, the following requirements shall also be observed for clay-lined ponds:

- (a) All vegetation, trash, stones, and other objects large enough to interfere with compaction will be removed from the pit site prior to compaction.
- (b) Compacted clay liners shall be a minimum of three feet (3') thick uniformly throughout the bottom and sides of the pit, with a extra two feet (2') of clay liner at the toes of sidewall slopes and under aerators, if used.
- (c) Clay materials shall be compacted by a sheep's foot roller in lifts not exceeding nine inches (9") in loose thickness to a minimum of 95% of the standard proctor density (ASTM D-698), with soil at optimum moisture content.
- (d) Fluid used to compact lifts of clay lining materials will be similar to fluids to be placed in ponds, without hydrocarbons.
- (e) A registered professional engineer shall certify correct placement, thickness, and compaction of the pond liner.

(f) At any point of discharge into the pond, no fluid force shall be directed to the clay liner. Splash pads to prevent erosion under aerators or on levees may include rip-rap or concrete aprons, synthetic materials, discharge tubes with upward facing outlets, or various weirs. ١.

- (3) Unless otherwise approved by the OCD, ground water monitoring will be required to detect an fluids released from clay lined facilities.
- e. Unlined Evaporation Ponds
 - (1) Unlined disposal ponds will not be approved in areas where fresh water (as defined by OCD rules) underlies the site unless the constituent quality of the produced water is better than then underlying ground water.
 - (2) Sufficient geologic and hydrologic information will be required to be provided to demonstrate that water disposal in unlined evaporation ponds will not migrate to areas of protectable fresh water.
- f. Spray Evaporation Systems
 - (1) Sprayer systems may be approved to enhance natural evaporation.
 - (2) Engineering designs for the sprayer system must be submitted for approval prior to installation.
 - (3) Spray systems shall be operated such that spray-borne salt does not leave the bermed area.
- g. Skimmer Ponds/Tanks
 - (1) Required Use

A skimmer pond or tank shall be used to separate any oil from the water prior to allowing the water to discharge into the evaporation pond, except for the following cases:

- (a) It can be shown that the water being discharged into the pond contains no oil or grease.
- (b) The discharge into the pond is from an oil or natural gas

processing facility where the discharge has already passed through a skimmer basin, skimmer tank, decanter, clarifier, or API Separator.

(2) Design Criteria

The skimmer pond shall be designed to allow or oil/water separation only; oil shall be removed in a timely manner and stored in tanks. Per OCD Rule 310, oil shall not be stored or retained in earthen reservoirs or in open receptacles.

- (a) If a skimmer pond is to be used, the pond shall conform to the same design criteria as the evaporation pond.
- (b) If a skimmer tank is to be used, the material of construction and/or design shall provide for corrosion resistance.
- (c) If a skimmer pond is to be used, siphons or other suitable means shall be employed to draw water from oil/water interface for transfer to the evaporation pond. The siphon shall be located as far as possible from the inlet to the skimmer pond.
- (d) The skimmer pond/tank shall at all times be kept free of appreciable oil buildup to prevent oil flow into the evaporation pond.
- (e) Figures 5 a & b illustrate general design criteria for skimmer ponds and tanks, respectively. All skimmer pond shall be lined unless specifically exempted.
- h. Fences, Signs and Netting
 - (1) Unless otherwise permitted by the OCD, a fence shall be constructed and maintained in good condition around the facility perimeter. Adequate space will be provided between the fence and levees for passage of maintenance vehicles. The fences shall be constructed so as to prevent livestock from entering the facility area. Fences shall not be constructed on levees.
 - (2) A sign not less than 12" x 24" with lettering of not less than two inches (2") shall be posted in a conspicuous place on the fence surrounding the facility. The sign shall be maintained in legible

condition and shall identify the operator of the disposal system, the location of the facility by quarter-quarter section, township, and range; and emergency telephone numbers.

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(3) To protect migratory birds, all tanks exceeding 16 feet in diameter, and exposed pits and ponds shall be screened, netted or covered. Upon written application by the operator, an exception to screening, netting or covering of a facility may be granted by the district supervisor upon a showing that an alternative method will protect migratory birds or that the facility is not hazardous to migratory birds.



NOTE: LEVEE TO BE CONSTRUCTED IN A MANNER SUCH THAT DESIGN COMPACTION AND DIMENSIONS PROVIDE FOR A MINIMUM SAFETY FACTOR OF TWO FOR FORCES ACTING AGAINST THE LEVEE.

FIGURE 2 - LEAK DETECTION SYSTEM

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NOTE: SKIMMER POND TO HAVE SEPARATE LEAK DETECTION SYSTEM AND SUMP.

FIGURE 3 - ANCHOR TRENCH

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POROUS MATERIAL FOR VENTING UNDER SECONDARY LINER

FIGURE 4 - VENT DESIGNS

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SOURCE: EPA REPORT #SW-870, "LINING OF WASTE IMPOUNDMENT FACILITIES", PG. 260





FIGURE 5: SKIMMER POND/TANK

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(A) SKIMMER POND

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(B) SKIMMER TANK



NOTE: BEFORE BEGINNING DISCHARGES TO SKIMMER POND/TANK, FILL WITH FRESH WATER TO SIPHON INLET. GUIDELINES FOR THE SELECTION AND INSTALLATION OF BELOW-GRADE PRODUCED WATER TANKS (revised 10/91)

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Environmental Bureau Oil Conservation Division

NEW MEXICO OIL CONSERVATION DIVISION STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO

PREFACE

The following specifications shall be used as a guide to the preparation of plans and specifications for the selection and installation of below-grade tanks and sumps to be used to contain those discharged or stored liquids regulated by the New Mexico Oil Conservation Division (OCD). Existing tanks and sumps installed need not comply with the following guidelines if the mechanical integrity of such installations can be shown in a manner acceptable to the OCD. All plans and specifications shall be submitted to the OCD for approval prior to installation. Designs may deviate from the following specifications if it can be shown that the design integrity is such that the installation will not affect any present or future sources of fresh ground water. If a number of tanks are to be installed in the same manner, only one set of plans and specifications need to be submitted provided that a list of all locations to be involved is included.

1. TANK SELECTION

- A. The tank capacity shall be selected in such a manner that sufficient volume is available to contain all the water produced during periods of inclement weather when it is not possible to drain the tank on a regular schedule. If the proposed plan submitted for OCD approval is to be used at a number of sites, a list of those sites and the estimated daily discharge of produced water from each site shall be submitted with the plans and specifications.
- B. The materials of construction selected for the tank shall exhibit strong corrosion resistance to those fluids the tank will store. If fiber reinforced plastic tanks are to be used, the material shall be resistant to sunlight and its design shall allow for expansion and contraction due to wide temperature shifts. If ferrous tanks are to be used, protective coatings and/or cathodic protection should be used to inhibit corrosion. The plans and specifications submitted for approval shall include the type of material selected and its thickness.

2. INSTALLATION

- A. The surface upon which the liner and tank rests shall be free of rocks and shall be level to prevent puncturing, cracking, or indentation of the liner or tank bottom.
- B. All below grade tanks shall have a leak detection system which may consist of a drainage and sump system. If a drainage and sump system is to be used, the design shall include the following criteria listed below and illustrated by Figure 1.:
 - A synthetic impermeable liner of at least 20 mil thickness shall first be placed upon the surface that will support the tank and will extend to above the ground surface.
 - Slotted or perforated drainage pipe (lateral) shall be placed upon the impermeable layer at a slope of at least 1 inch per 10 feet. The drainage pipe shall be a minimum of one inch in diameter.
 - 3) The drainage pipe shall then be covered with sand, gravel, or other material with sufficient permeability to convey fluids to the drainage pipe.

- 4) The tank shall then be placed upon this surface and a riser pipe (sump) connected to the drainage pipe. The riser pipe shall be a minimum of 2 inches in diameter.
- 5) The secondary liner shall then be strapped to the tank above the ground surface and in a manner to prevent rain water from entering the space between the tank and liner.
- C. A tank and liner resting within the ground water shall be adequately anchored to prevent floating.
- D. For tanks located below the ground surface in an open pit, no secondary containment is required. The tank shall rest on a gravel pad one inch thick (1" minimum), and the entire tank shall be exposed to visually detect leaks (see Figure 1).

3. MAINTENANCE

A. The leak detection sumps shall be inspected on a routine basis at a minimum of once every thirty (30) days. The proposed frequency shall be included with the plans and specifications submitted for approval. B. The detection of fluid within the sump will require reporting the detection to the appropriate OCD District Office within 24 hours of discovery, obtaining a sample of the fluid, and having the sample analyzed for major cations/anions. benzene, toluene, ethylbenzene, total xylenes (BTEX), and conductivity. A copy of the analysis shall be sent to the appropriate OCD District Office. An analysis of the fluids in the tank may be required for comparison with the above analysis. If the presence of fluid in the leak detection system is due to a tank leak, the contingency plan shall be implemented.

4. <u>CONTINGENCY PLAN</u>

A contingency plan in the event of a tank leak shall be submitted for approval along with the details for tank selection, installation, and maintenance. The contingency plan shall outline a procedure for making repairs to the tank in the most expeditious manner possible.

FIGURE I: TANK INSTALLATION

1. BACKFILLED



2. OPEN PIT OR ABOVE GROUND



ATTACHMENT X :

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A visual inspection of the storage areas will be conducted on a daily basis during the work week.

All valuing and piping will be inspected on a semi-annual basis. And replaced as needed.

All sumps will be cleaned and inspected with written documentation on an annual basis.

All reporting procedure will compile with N.M.O.C.D. rule 116 and W.Q.C.C. 1-203.

In the event of a reportable spill the local N.M.O.C.D. office would be contacted 505-334-6178.

Please find attached Energy Air Drilling's Emergency Hazardous Contingency Plan. (Second Draft)

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Environmental Bureau Oil Conservation Division

EMERGENCY HAZARDOUS CONTINGENCY PLAN For Energy Air Drilling Service Co. 5633 Highway 64

Farmington, New Mexico 81505 (505) 327-6801

EMERGENCY NUMBERS:

 POLICE
 911
 Non Emergency: 327-7701

 FIRE
 911
 Non Emergency: 599-1430

 AIR CARE
 911
 Non Emergency: 334-6622

OSHA (Occupational Safety & Health Administration) (505) 827-2850 (Santa Fe, NM)

HAZARDOUS MATERIALS:

STATE OIL CONSERVATION: (505) 334-6178 (Aztec, NM)

FEDERAL ENVIRONMENTAL HEALTH (505) 325-4446 (Farmington, NM)

POISON CONTROL & DRUG INFORMATION (800) 432-6866

PREFERRED MEDICAL PROVIDERS:

NEW MEXICO WORKERS COMPENSATION:

BRUCE CARR, M.D. (505) 325-1954 (Farmington, NM) or GEORGE HUNT PEACOCK, M.D. (505) 327-6029 (Farmington, NM) SAN JUAN MEDICAL CENTER (505) 325-5011 (Farmington, NM)

24 HOUR RESPONSE:

(505) 632-0615 (Farmington, NM)

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Rev 9.22.95

ENVIROTEC

THE FARMINGTON DIVISION OF ENERGY AIR DRILLING SERVICE CO. 5633 HIGHWAY 64 FARMINGTON, NEW MEXICO 87401 OFFICE: (505) 327–6801 JERALD TUFLY, VICE–PRESIDENT (505) 325–8569

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I INTRODUCTION

Energy Air Drilling Service Co. is a small company providing large volume, high pressure air compressors and service to the oil and gas drilling business. The Farmington, New Mexico division employs 9 people on a 24 hour a day - 7 days per week basis.

The company is situated at 5633 Highway 64, between Farmington and Bloomfield, New Mexico. The building and yard are rented from Earl Lang - telephone # (505) 326-3371 (work). The building is a 3200 sq.ft. 40' x 40' metal building with 2 overhead 12' x 16' doors facing east, and 1 overhead 12' x 16' door facing west. To the north of the building is a 12' x 40' office trailer. The building is located on about 1 acre of land. An open lot is to the west of the site, and to the east is a dirt moving equipment dealer. The lot and building to the north is approximately a 12' upgrade from the Energy Air Drilling Service Co. site and lays between Route 64 and the Energy Air Drilling Service Co. site. To the east is another building sharing the same site as Energy Air Drilling Service This small building is a crematorium. To the south, Co. sloping downhill, is a drilling company's yard for drilling rig storage.

SITE MAP

Farmington, New Mexico Shop & Yard



EAST

Fire Extinguishers

LEGEND:

- 2 First Aid Kit
- 3 Phone

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- 4 Contingency Plan MSDS Book
- 5 Diesel Overhead Tank 500 Gallon
- 6 Used Oil 500 Gallon Tank on Skid
- 7 Motor Oil 55 Gallon Drums on Drum Racks
- 8 Foaming Agents 55 Gallon Drums
- 9 Eye Wash Station
- 10 Protective Equipment
- I PRIMARY ESCAPE
- II SECONDARY ESCAPE
- *III OFFICE*
- IV COMPRESSOR SHED
- V STORAGE SHED

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II <u>FACILITY LAYOUT</u> (See Fig.1 Farmington Shop & Yard Site Map)

The facility does not store any hazardous waste inside, other than a parts washer which is owned and serviced by Safety Kleen Corporation - telephone # (505) 884-2277 (Albuquerque), which recycles spent solvent and de-greaser.

Paint and solvents are stored in the northwest corner of the shop in a metal cabinet.

Welding gases are stored on the north wall of the shop building. The oxygen and acetylene are stored separately and are secured to the north wall with tie back chains.

Bio-degradable foaming agents, corrosion inhibitors (filming amine), and drilling polymers are all stored outside to the south of the shop building. They are stored on a concrete pad with a 4 inch berm provided in the event of a spill. Barrels are stored on 4 inch raised pallets.

Used engine oil is burned as heating fuel in a Wedco used oil furnace. Oil filters are drained and crushed. Safety Kleen provides a barrel and picks up the crushed filters as part of their monthly service. The used engine oil is stored in a 500 gallon tank prior to being burned in the furnace. The tanks have a 4" concrete berm provided to prevent leakage into any drain systems or in the event of a spill.

Diesel storage is in an overhead 500 tank with a hand operated filler nozzle. The storage has a concrete pad with a containments berm to prevent leakage into a drain system in the event of a spill.

Used oil barrels are returned to the vendor for credit.

Emergency equipment is stored in the shop office on the southwest side of the building. Fire extinguishers are hanging on the walls and have markings as to their whereabouts. Evacuation routes are marked on the facility and site map. "I" signifies Primary Route, "II" signifies Secondary Route.

"Employees' Right to Know" station and Material Safety Data

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Sheet (MSDS) books are located on the south side of the building near the shop office. All shop and field chemicals have material safety data sheets, plus inventory of chemicals. A copy of this contingency plan is with the "Right to Know" and MSDS master book.

III EMERGENCIES PLANNED FOB

This plan is intended to deal with three types of emergencies:

<u>FIRE</u>

The parts cleaning material managed at this facility could be ignitable. The paint and solvents could result in an explosion if the heat or flames of a fire reached these materials.

<u>FLOOD</u>

Run-off from a flood overflowing the storage area of the drilling chemicals could carry non-toxic constituents to nearby flood drains.

DISCHARGE

A spill could present a threat of exposure or contamination to facility personnel. All of the materials handled are water soluble and neutralized with water.

In the event of an emergency, the local fire and police departments and hospitals are all within a five mile radius, approximately 10 - 15 minutes driving time from the facility.

IV <u>ENVIRONMENTAL RESPONSE TEAM</u>

Emergency Coordinator

Jerald Tufly 2402 Glade Road Farmington, New Mexico 87401

325-8569	Home Phone
327-6801	Office
860-0762	Cellular
326-8456	Pager
	325-8569 327-6801 860-0762 326-8456

To be contacted immediately in the event of an accident. This person will be responsible for notifying appropriate emergency response authorities, directing emergency response procedures, and determining if a facility evacuation is necessary.

Alternate Emergency Coordinator

Greg Martin

(505)	632-5406	Home Phone
(505)	327-6801	Office
(505)	320-2858	Cellular

On-Site Emergency Responders

Employees handling hazardous waste receive training in the day to day management of hazardous waste in such emergency response actions as basic fire fighting, use of personal protective equipment, and procedures to mitigate emergencies. These workers are the only employees, along with the primary and alternative coordinators, to handle and/or respond to hazardous waste incidents.

<u>Personnel</u>

Shawn Lambright (505) 327-6801 Work (505) 325-4025 Home Shipping/Receiving of drilling chemicals, label materials with appropriate hazardous labels, chemical inventory clerk.

Job Description

Daniel Chenoweth (505) 327-6801 Work (505) 327-0770 Home Shipping/Receiving of drilling chemicals and supplies.

Environmental Clean up 24-Hour Response

Envirotec 5796 US Highway 64 - 3014 Farmington, New Mexico 87401 (505) 632-0615

EMERGENCY RESPONSE EQUIPMENT

Energy Air Drilling Service Co. maintains Emergency Response Equipment, Contingency Plans, and First Aid Kits in the facility in the areas marked on the facility and site map (see Fig. #1).

- Fire Prevention Equipment stored on walls: 4 ABC Fire Extinguishers;
- 2) Protective Equipment stored in cabinet: Rubber gloves, aprons, 2 organic respirators;
- 3) Clean-up Equipment stored on south wall next to shop office:
 - 4 100 lb bags absorbent material
 - 2 Plastic shovels
 - 2 Brooms
 - 1 Plastic swimmer pool with hose for decontamination;

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- Health/Safety Equipment: Eye Wash and shower;
- 5) Communication Equipment: Alarm Bell - Telephone

VI EMERGENCY PROCEDURES

All employees who handle, or are potentially exposed to, hazardous materials/waste, receive emergency response training. Workers who handle hazardous waste or potentially hazardous waste (presently 4 of them) receive annual RCRA training, at which time specific individual responsibilities under the contingency plan are discussed.

Figures #2, #3, and #4 (attached) are "Decision Trees", which illustrate the general procedures that workers and the emergency coordinator should follow in the event of a fire, flood, or spill.

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FIGURE 3





FIGURE 4



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VII REPORTING OBLIGATION

To the extent possible, the emergency coordinator shall make a contemporaneous record of significant emergency events and of the actions taken in response.

Within 3 working days of anv emergency requiring implementation of this plan, the emergency coordinator shall make a full written report describing the incident in detail as well as all actions taken in response. Within 15 days after the incident, the emergency coordinator must submit a written report to the appropriate state agency and the regional administrator, providing such information as the following:

- * Name, Address, and Phone Number of the facility and the Owner/Operator;
- *** Date, Time, and Type of Incident;
- * Type and Quantity of material involved in the accident;
- * Potential harm to human health and the environment, including the extent of any injuries;
- * Estimated quantity and method of disposal of wastes resulting from the incident.

VIII <u>EMERGENCY PREPAREDNESS</u>

Emergency preparedness inspections are standard operating procedures for Energy Air Drilling Service Co. Inspections minimize the possibility of a fire, explosion, or flood, and provide assurance that emergency response will be operable at the time of an accident. The following "checklist inspections" will be performed on a routine basis:

<u>Daily</u>	
1)	Check access clearance to fire exits;
2)	Check storage areas:
	a) Are bungs tight? b) Are ground attached? c) Any spills?
3)	Check proper use of non-smoking areas;
4)	Check eye protection and respiratory devices for general cleanliness;
5)	Check ventilation system;
6)	check monitoring equipment;
7)	Check that adequate aisle space is maintained.
<u>Weekly</u>	
1)	Check drum storage?
	a) Rust? b) Dents?

- c) Safe stacking?
- 2) Are all containers locked?
- 3) Check supply of absorbent;
- 4) Check communication system.

<u>Monthly</u>

- 1) Check condition of eye wash station;
- Check hazardous waste labels, posting, signs, and non-smoking area;
- 3) Check fire extinguishers;
- 4) Test fire alarms;
- 5) Check respirators;
- 6) Check spill control and decontamination equipment.

<u>Semi-Annually</u>

- 1) Fire drill;
- 2) Check furnace, overhead heaters, hot tank, steam cleaner, and hot water heaters;
- 3) Review emergency response procedures with emergency response team.

<u>Annually</u>

1) In-House facility inspection/audit.

IX COMMUNICATION WITH LOCAL AUTHORITIES

Energy Air Drilling Service Co. has made every effort to inform local fire, police, and medical authorities of potential hazards that exist at the facility, and of the existence of a facility Contingency Plan. Energy Air Drilling Service Co. has invited local agencies to participate in the development of this Contingency Plan, and has sent the plan to local emergency response groups.

Energy Air Drilling Service Co. has made arrangements with ENVIROTEC - 5796 US Highway 64, Farmington, NM 87501 -Emergency Phone # (505) 632-0615, to provide 24 hour cleanup and disposal services in the event of an accident.

Energy Air Drilling Service Co. also made every effort to make arrangements with state emergency response agencies by sending copies of the Contingency Plan to the appropriate officials. State and local agencies are immediately apprised of any amendments to the Contingency Plan. Certified letters documenting communication with these agencies are available. 1. 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 pas drilling, producing, comporting, or processing facility in the State of New Maxico by the person operating or controlling such facility.

B. "Tacility," for the purpose of this rule, shall include any oil or gas well, any injection or disposal well, and any drilling or worknew well; any pipe line through which crude oil, condensate, casingheed 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 casingheed or natural gas is produced, received, or storad; any injection or disposal pumping or compression station including related equipment; any processing or refining plant in which crude oil, condensate, or shored oil, condensate, or casingheed 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 oparations 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 raxidue, salt water, strong caustics or strong acids, or other delatarious chamicals or hydrocarbon wastes or raxidue, salt water, strong caustics or strong acids, or other delatarious chamicals or hydrocarbon wastes or raxidue, salt water, strong caustics or strong acids, or other delatarious chamicals or hydrocarbon wastes.

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

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

(2) <u>"Faior" Breaks, Spills, or Leaks</u>. Notification of breaks, spills, or leaks of 25 or more barrals of crude oil or condensate, or 100 barrals 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 barrals of crude oil or condensate or 25 barrals or more of salt water does reach a watercourse or enters a stream or lake; and breaks, spills, or leaks of salt water, strong constices or strong acids, gases, or other deletarious chemicals or harsful contaminants of any magnitude which may with reasonable probability endanger brane bealth or result is substantial damage to property, shall be "immediate notification" described balow.

(3) <u>"Minor" Breaks. Spills, or Leaks</u>. 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 watar, none of which reaches a watarcourse or estars a stress or lake, shall be "subsequent notification" described below.

(4) "Gas Leeks and Ges Line Breeks. Notification of gas leaks from any source or of gas pipe line breaks in which natural or casingband gas of any quantity has escaped or is escaping which may with reasonable probability endanger bound bealth 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 casingband gas but in which there is no damage to human bealth nor of substantial damage to property shall be "subsequent notification" described below.

(5) <u>Tank First</u>. 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 barrals of crude oil or condensate, or fires which any with reasonable probability endanger boson bealth or result in substantial demage to property, shall be "immediate notification" as described balow. If the loss is, or it appears that the loss will be at least 5 barrals but less than 25 barrals, notification shall be "subsequent notification" described balow.

(6) <u>Drilling Pits, Slush Pits, and Storage Pits and Ponds</u>. 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 deletarious obsaical or hermful contaminant endangers bomen bealth or does substantial surface demone, or reaches a wetercourse or enters a stream or lake in such quantity

Attachment No. 5



OCT 2 3 1995

Environmental Bureau Oil Conservation Division (7) INTEDIATE NOTIFICATION. "Immediate Notification" shall be as soon as possible after discovery and shall be either person or by talephone to the district 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 DOPLICATE to the appropriate district office of the Division within ten oays after discovery of the incident.

(8) <u>SUBSECCENT NOTIFICATION</u>. "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) <u>CONTENT OF NOTIFICITION</u>. All reports of firms, breaks, leaks, spills, or blowouts, whether verbal or written, shall identify the location of the incident by quarter-quarter, section, townsnip, 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 remody the situation reported.

(10) <u>WATTRCOURSE</u>, for the purpose of this rule, is defined as any lake-bed or gully, draw, stress bed, wash, arroyo, or natural or san-made channel through which water flows or has flowed. 1-203. NOTIFICATION OF DISCHARGE--REMOVAL.

A. With respect to any dischart from any facility of oil or other exter 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/operation shall endeavor to contact and consult with the Chief. Ground Water Bureau, Environmental Improvement Division appropriate counterpart in a celegated 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.

The Bureau Chief shall approve or disapprove 7. 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.

In the event that the modified corrective 8. 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.

Exempt from the requirements of this section are 8. continuous or periodic discharges which are made;

in conformance with water quality control 1. 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.

> As used in this section: C.

"discharge" means spilling, leaking, pumping, 1. 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;

"facility" means any structure, installation, 2. 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;

"operator" means the person or persons 4. 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.

Notification of discharge received pursuant to D. 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.
ATTACHMENT X C :

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Precipitation runoff from the northern edge of the property is channeled to the east where it is picked up with the flow from the drive way and travels to a small arroyo flowing off the property at the southeast corner.

Precipitation that comes in contact with the proposed wash pad area would travel to the holding tank and be treated as explained in Attachment VIII :.

To the west side of the property an earthen bank has been placed that protects the property owners to the west from any runoff.

Please refer to the attached drawing:



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OCT 2 3 1995

Environmental Bureau Oil Conservation Division



AVAILABILITY OF HYDROLOGIC DATA IN SAN JUAN COUNTY, NEW MEXICO

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

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OCT 2 3 1995

Environmental Bureau Oil Conservation Division

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.





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.

577

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. Streamdischarge 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. Waterquality 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.

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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 NW4, NE4, SW4, and SEL respectively. The quarter section may be further subdivided in a similar The number of digits in the fourth segment of the location number manner. 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, 2¹/₂-acre tract. A well with a location number 21.07.28.213 is located in the southwest $\frac{1}{2}$ of the northwest ½ of the northeast ½ 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 $32 - 3.65 \times 17.05$ is in quadrangle number 32, 3.65 miles from the east line and 17.05 from the north line as shown in figure 2.



Figure 2.--Well-numbering systems.

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- U.S. Geological Survey, various years, Water resources data for New Mexico: U.S. Geological Survey Water-Supply Papers (prior to 1962) and annual water-data reports (1962-83).
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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 Oc - 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 Farmington Sandstone Member Kkm -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 Westwater Canyon Sandstone Member Jmw -Recapture Shale Member Jmr -Salt Wash Sandstone Member Jms -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 -- Approx

HYDROLOGIC DATA EXPLANATION

- 20 WATER WELL--Number is depth of well below lond surface, in feet; Qal letters indicate geologic source of water. (See principal water-bearing unit(s) in table 1, and aquifer in table 2.)
- 32x 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*

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

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LOCATION	NAME	WELL NUMBER	USE	DEPTH	PERFORATIONS AQUIFER
·29.12.14.11	Trantham, Teddy O.	SJ-0548	dom, stk	180	•
29.12.15.143_	Kennedy, George L.	SJ-1510	dom	155	135-155
29.12.19.344	Horvath, Robert T.	SJ-0567	dom	28	
29.12.19.414	Brainard, Lee	SJ-0657	dom	85	
29.12.19.431	James, Truett C.	SJ-1070	dom, stk	38	
29.12.19.44	Hanson, Gale	SJ-0953	dom	76	
29.12.20.333	Hammond, Bob	SJ-0338	dom, stk	28	
29.12.24.32	Murphy, John L.	SJ-1597	dom	40	
29.12.24.34	Thomason, James W.	SJ-0400	dom, stk	83	60-83
29.12.25.12	Sutherlen	SJ-0938	dom	80	
29.12.25.14	Cross, Frankie J.	SJ-0706	dom	49	
29.12.25.14	Kirby, Richard L.	SJ-0652	dom	42	
29.12.25.14	Runvan, Roy A.	SJ-1322	dom	42	
29.12.25.143	Palmer, Andrew L.	SJ-0617	dom	47	
29.12.25.24	Sierra, Raymond M.	SJ-1466	dom, stk	27	
29.12.25.31	Bradley, Davis	SJ-0570	dom	36	
29.12.25.43	Jacob, Lawrence	SJ-0763	dom	60	20-60
29.12.26.21	Roquemore, Dean	SJ-0777	dom	47	
29.12.26.211	Dufur, Ralph L.	SJ-1109	dom	100	
29.12.26.24	Nunn, Ewing H.	SJ-1194	dom	38	
29.12.26.34	Durrett, James M.	SJ-0112	dom,stk	47	
29.12.26.42	Fielder, Charles E.	SJ-1802	dom	70	59-69
29.12.26.42	Osburn, Lewis R.	SJ-1326	dom	50	
29.12.26.422	Buck, Lee A.	SJ-1469	dom, stk	45	
29.12.26.422	Lozon, Lawrence J.	SJ-0399	dom	45	
29.12.27.13	Bustos, Daniel	SJ-1590	dom	63	
29.12.27.131	Reynolds, Ronald	SJ-0726	dom	50	
29.12.27.133	Chacon, Alfonso J.	SJ-0827	dom	55	
29.12.27.133	Kaiser, Charles	SJ-1008	dom	51	
29.12.27.134	Torres, Richard	SJ-0666	dom	35	
29.12.27.31	Bencomo, Joe	SJ-0572	dom	35	
29.12.27.31	Harmon, Douglas A.	SJ-1700	dom	87	
29.12.27.31	Palmer, Charlie W.	SJ-1728	dom	25	
29.12.27.311	Clark, Doris	SJ-1690	dom	25	
29.12.27.311	Orellano, Reynaldo W	SJ-0904	dom, stk	32	
29.12.27.313	Brewer, Gerald A.	SJ-0901	dom, stk	32	

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

	Location	Latitude- Longitude	Number of name	Depth (feet)	Alti- tude (feet)	Depth to Water (feet)	Date	Producing interval (fest)	Frincipal water- basing unit(s)	Specific conduct ance (umhos at 25°C)	Date	Logs available	Bafarence	Draw- down (fest)	Dis- charge (gal/ mim)	Dura- tion (bours)	Separks
	29.11.25.132	364158 1075653	Bur. Bec. #39	101	5,470	1.8	04-16-68	-	Ta	6,300	04-16-68	-	4	,-	-	*	-
	29.11.30.211	364212 1080132	Marciso Archibecue		5.465	43			Qal	748 •	04-09-68	-	-	-	•	-	-
	29.11.30.233	364152 1080152	Delbert Blaks	91	5,390	5.5	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	TIOS	-	-	•	-	-	-	-	Oil test plugg
	29.11.31.3424	364042 1080158	Richard Sege	326	5,480	•	-	-	Tios	-	-	-	-	-	-	-	"Not fit to drink".
	29.11.34.4144	364046 1075827	•	800	3,640	-	-	-	Tios	-	-	TOP	-	•	₹.	• ·	Source for H ₂ 0 Imjected; plugged back
								•									from TD of 1,355 feat.
7	29.12.06.133	364521 1080847	George McColm	16	5,440	6	11-24-53	-	Qal	2,250 +	11-24-53	-	•		. 10	-	• •
	29.12.07.4133	364417 1080817	7th Day Avent Church	ь 234	5,600	170.5	10-08-74	-	Kkf, Thea	2,500	10-08-74	•	-	-	•	•	-
	29.12.18	-	Yan'im Pet.	-	-	-	· -	1,435-1,448	Kpc	- •	· 04-30-59	•	•	-	-	-	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	-	-	-	•	-	-
.	29-17-19-3231	364235 1080837	Thomas P. Kirby	-	5.330	12.1	04-05-68		Qal	900	04-05-68	-	•	-	•		
	29.12.20	-	-	-	-	-	-	1,550	Kpc	- •	590	-	•	-	-	-	Malysis only, TDS = 30,200 mg/L, 1959.
	29.12.20	-	Pan Ja Pat.	1,415	5,437	-		1,378-1,388	Lpc .	59,200 +	02-22-59	-	-	-	•	-	Cas well, sample Ston pit.
	29.12.21.3	-	-	-	-	-	-	-	- '	4,090 **	03-15-74	-	-	-	-	•	malysis only.
	29.12.28	-	Tab da	-	-	-	-	-	Kpc	- •	94-30-59	-	•	-	-	-	Gas well; TDS 37,800 mg/
×	29.12.28.2111	364215 1080609	D. H. Brownles	120	يو در د	18.8	11-07-74	-	Tios	-	•	-	-	-'	-	•	Unused.
[29.12.29	.•	Tan Ja	44	•	•	-	-	Qul	- •	04-30-59	-	•	-	• •	•	Reported casing depth; TDS = 2,210 mg/L
	29.12.30	-	-	-	-		-	1,240	Хрс	- •	39	-	٠	-	•	•.	WHF depth = 1,240 ft; TDS = 43,600 mg/L.
	20 12 33 3411	364111 1080553	_	850	5 360		10-21-74	-	Ref	12,250	10-21-74	-	-	-	34	-	Bannend Canal Well.
	29.12.34.421	364056 1080450	Bureau of Reclemention	134	5,370	5.3	04-17-68	-	Qa1	2,950 +	04-17-68	-	-	₹.	• '	• . •	Stovepipe casing.
		364036 1080500		100			10-11-14	_	Tios	-	• •	•	-	-	•	-	-
					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	• • •			Qa1	4,620 =	04-18-68	-	-	-	•	-	Stovepipe casing.
	29.12.33.342	364042 1080410	Buresu or Botlamation #26	64	3,390	3.9	04-18-65	-	· · ·	· ·							
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GUIDELINES

XIII. A

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FOR



OCT 2 3 1995

Environmental Bureau Oil Conservation Division

REMEDIATION

OF

LEAKS, SPILLS AND RELEASES

(AUGUST 13, 1993)

New Mexico Oil Conservation Division

5

INTRODUCTION



The following document is to be used as a <u>guide</u> 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

INTRODUCTION

I.

\$

- NOTICE OF LEAK, SPILL OR RELEASE
 - A. RESPONSIBLE PARTY AND LOCAL CONTACT
 - B. FACILITY
 - C. TIME OF INCIDENT
 - D. DISCHARGE EVENT
 - E. TYPE OF DISCHARGE
 - F. QUANTITY
 - G. SITE CHARACTERISTICS
 - H. IMMEDIATE CORRECTIVE ACTIONS

II. <u>INITIAL RESPONSE ACTIONS</u>

- A. SOURCE ELIMINATION AND SITE SECURITY
- B. CONTAINMENT
- C. SITE STABILIZATION

III. <u>SITE ASSESSMENT</u>

- A. GENERAL SITE CHARACTERISTICS
 - 1. Depth To Ground Water
 - 2. Wellhead Protection Area
 - 3. Distance To Nearest Surface Water Body
- B. SOIL/WASTE CHARACTERISTICS
 - 1. Highly Contaminated/Saturated Soils
 - 2. Unsaturated Contaminated Soils
- C. GROUND WATER QUALITY
- IV. SOIL AND WATER REMEDIATION ACTION LEVELS
 - **A.** SOILS
 - 1. Highly Contaminated/Saturated Soils
 - 2. Unsaturated Contaminated Soils
 - a. <u>Ranking Criteria</u>
 - b. <u>Recommended Remediation Level</u>
 - B. GROUND WATER

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SOIL AND WATER SAMPLING PROCEDURES

- A. HIGHLY CONTAMINATED OR SATURATED SOILS
 - 1. Physical Observations
- B. UNSATURATED CONTAMINATED SOILS
 - 1. Soil Sampling Procedures for Headspace Analysis
 - 2. Soil Sampling Procedures For Laboratory Analysis
 - a. <u>Sampling Procedures</u>
 - b. <u>Analytical methods</u>
- C. GROUND WATER SAMPLING
 - 1. Monitor Well Installation/Location
 - 2. Monitor Well Construction
 - 3. Monitor Well Development
 - 4. Sampling Procedures
 - 5. Ground Water laboratory Analysis
 - a. <u>Analytical Methods</u>

VI. <u>REMEDIATION</u>

- A. SOIL REMEDIATION
 - 1. Contaminated Soils
 - 2. Soil Management Options
 - a. <u>Disposal</u>
 - b. Soil Treatment and Remediation Techniques
 - i. Landfarming
 - ii. Insitu Soil Treatment
 - iii. Alternate Methods

B. GROUND WATER REMEDIATION

1. Remediation Requirements

- a. Free Phase Contamination
- b. <u>Dissolved Phase Contamination</u>
- c. <u>Alternate Methods</u>

VII. <u>TERMINATION OF REMEDIAL ACTION</u>

- A. SOIL
- B. GROUND WATER
- VIII. <u>FINAL CLOSURE</u>
- IX. FINAL REPORT

I. NOTIFICATION OF LEAK, SPILL OR RELEASE

Leaks, spills and releases of any wastes or woducts 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 quarterquarter, 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 second 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. Unsamurated 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.

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Unsat Tated 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

<u>Depth To Ground Water</u>	<u>Ranking Score</u>
<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. <u>Recommended Remediation Action Level</u>

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					
	<u>>19</u>	<u>10 - 19</u>	0 - 9			
<u>Benzene(ppm) *</u>	10	10	10			
<u>BTEX(ppm) *</u>	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 remased.

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. <u>Sampling Procedures</u>

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. <u>Analytical Methods</u>

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 dexempt sites (Note: The initiallation 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 boratory 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. <u>REMEDIATION</u>

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. <u>Disposal</u>

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.

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. <u>Dissolved Phase Contamination</u>

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. <u>Alternate Methods</u>

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

MED BLOWOUTS

B. "Tacility," for the purpose of this rule, shall include any oil or gas wall, any injection or disposal wall, and any drilling or workover wall; any pipe line through which crude oil, condensate, casingheed 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 casingheed or natural gas is produced, received, or storad; any injection or disposal pumping or compression station including related equipment; any processing or refining plant in which crude oil, condensate, or storade oil, condensate, or storade oil, condensate, or casingheed or natural gas is produced, received, or storad; any injection or disposal pumping or compression station including related equipment; any processing or refining plant in which crude oil, condensate, or casingheed 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 pool associates with oil or gas production or processing operations or with injection or disposal operations and containing hydrocarbons or hydrocarbon waste or residue, salt watar, strong caustics or strong acids, or other deletarious chemicals or harmful contaminents.

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

(1) <u>Hell Blowouts</u>. Notification of well blowouts and/or fires shall be "immediate notification" described below. ("Hell blowout" is defined as being loss of control over and subsequent eruption of any drilling or vorkover well, or the rupture of the casing, casingheed, or wellheed or any oil or gas well or injection or disposal well, whether active or inactive, accompanied by the modem emission of fluids, gaseous or liquid, from the well.)

(2) <u>"Major" Breaks, Spills, or Leaks</u>. Notification of breaks, spills, or leaks of 25 or more barrels of crude oil or condensate, or 100 barrels or more of sait 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 sait water does reach a watercourse or enters a stream or lake; and breaks, spills, or leaks of bydrocarbons or bydrocarbon waste or residue, sait water, strong consticts or strong acids, gases, or other deletarious chemicals or harmful contaminants of any magnitude which may with reasonable probability endanger basen bealth or result in substantial damage to property, shall be "immediate notification" described below.

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(3) <u>"Minor" Breaks, Spills, or Leaks</u>. 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 sait water, none of which reaches a watercourse or enters a stress or lake, shall be "subsequent notification" described below.

(4) "Gas Lesks and Ges Line Breaks. Notification of gas leaks from any source or of gas pipe line breaks in which natural or casingheed 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 HCF of natural or casingheed gas but in which there is no damage to human health nor of substantial damage to property shall be "subsequent notification" described below.

(5) <u>Tank Firms</u>. Notification of firms 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 sore herrels of crude oil or condensate, or firms which may with reasonable probability endanger homen health or result in substantial demage 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) <u>Drilling Pits, Slush Pits, and Storage Pits and Ponds</u>. 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 bealth or does substantial surface damage, or reaches a wetercourse or enters a stream or lake in such quantity (7) Instant HOTHICHTER. "Isonedists Notification shall be as soon as possible after discovery and shall be either in person or by talephone to the district oracle 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 DOPLICHTE to the appropriate district office of the Division within tan oays after discovery of the incident.

(8) <u>SUBSECUENT NOTIFICATION</u>. "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) <u>CONTENT OF NOTIFICATION</u>. 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) <u>WATTRCOURSE</u>, for the purpose of this rule, is defined as any lake-bed or gully, draw, stream bed, wash, arroyo, or natural or san-unde channel through which water flows or has flowed.

APPENDIX B

1-203. NOTIFICATION OF DISCHARGZ--REMOVAL.

A. With respect to any dischart from any facility of oil or other ater 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 intact and consult with the Chip Ground Water Bureau, Environmental Improvement Division 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.

APPENDIX C

TELEPHONE LISTING OIL CONSERVATION FAX NO. 827-8177



MAIN LINE - 827-7131

DIRECTOR'S OFFICE:

William LeMay	827-7132
Florene Davidson	827-7132
Sally Martinez	827-7133

GAS MARKETING

Ron Merrett	827-7146
Lyn Hebert	827-1364
Dorothy Phillips	827-7137
Angela Romero	827-7148
Chris Williams	827-7149

ADMINISTRATIVE BUREAU

Edwin Martin	827-7151
Mary Anaya	827-7150
Lupe Sherman	827-7178

ENVIRONMENTAL BUREAU

Roger Anderson	827-7152
Mark Ashley	827-7155
Pat Sanchez	827-7156
Chris Eustice	827-7153
William Olson	827-7154
Mobil No.	660-1067

RECORDS CENTER

Elizabeth Roybal	827-8164
Lawrence Romero	827-8166

HEARING ROOM - 827-7082

LEGAL BUREAU

Rand Carroll	827-8156
Diane Richardson	827-8153

ENGINEERING BUREAU

David Catanach	827-8184
Roy Johnson	827-8198
Michael Stogner	827-8185
Ben Stone	827-8186
Kathy Valdes	827-8182
Vacant	827-8183

KEY ENTRY SECTION

Becky Espy	827-8194
Rick Brown	827-1363
Fran Chavez	827-7158
Dolly Huffman	827-8196
Isabel Montoya	827-8195
Lynn Rivera	827-8197
Andrea Lauber	827-1362

ONGARD IMPLEMENTATION

Ed N	Martin	827-7151
L'U I		04/-/151

DISTRICT OFFICES

Aztec	334-6178
Artesia	748-1283
Hobbs	393-6161

FAX_NOS. FOR DISTRICTS

AZTEC	334-6170
ARTESIA	748-9720
HOBBS	393-0720



Please contact the Oil Conservation Division concerning any waste or disposal methods not listed.

EPA WASTE CLASSIFICATIO O & G EXPLORATION AND PRODUCTION WASTES*

Oil and Natural Gas Exploration and Production Materials and Wastes Exempted by EPA from Consideration as "Hazardous Wastes" (provided non-exempt waste which is or may be "hazardous" has not been added):

- Drilling fluids;
- . Drill cuttings;
 - Rigwash;
- Drilling fluids and cuttings from offshore operations disposed of onshore:
- Geothermal production fluids;
- Hydrogen sulfide abatement wastes from geothermal energy production;
- Well completion, treatment, and stimulation fluids:
- Basic sediment and water and other tank bottoms from storage facilities that hold product and exempt waste:
- Accumulated materials such as hydrocarbons, solids, sand, and emulsion from production. separators, fluid treating vessels, and production impoundments;
- Pit sludges and contaminated bottoms from storage or disposal of exempt wastes:
- Workover wastes;
- Gas plant dehydration wastes, including glycol-based compounds, glycol filters, filter media, backwash, and molecular sieves:
- Gas plant sweetening wastes for sulfur removal, including amines, amine filters, amine filter media, hackwash, precipitated amine sludge, iron sponge, and hydrogen sulfide scrubber liquid and sludge;
- Cooling tower blowdown:

Produced water; Spent filters, filter media, and backwash (assuming the filter itself is not hazardous and the residue in it is from an exempt waste steam);

- . Packing fluids:
- Produced sand:
- . Pipe scale, hydrocarbon solids, hydrates, and other deposits removed from piping and equipment prior to transportation;
- Hydrocarbon-bearing soil;
- . Pigging wastes from gathering lines:
- Wastes from subsurface gas storage and retrieval, except for nonexempt wastes listed below:
- Constituents removed from produced water before it is injected or otherwise disposed of;
- . Liquid hydrocarbons removed from the production stream but not from oil refining;
- Gases from the production stream, such as hydrogen sulfide and carbon dioxide, and volatilized hydrocarbons;
- Materials ejected from 8 producing well during the process known as blowdown:
- Waste crude oil from primary field operations and production;
- . Light organics volatilized from exempt wastes in reserve pits or impoundments or production equipment;
- . Liquid and solid wastes generated by crude oil and crude tank bottom reclaimers***.

Materials and Wastes Not Exempted (may be a "hazardous waste" if tests or EPA listing define as "hazardous") **:

- . Unused fracturing fluids or acids:
- Gas plant cooling tower cleaning wastes:
- Painting wastes;
- Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spent solvents, spilled chemicals, and waste acids;
- Vacuum truck and drum rinsate from trucks and drums transporting or containing nonexempt waste;
- Refinery wastes;
- Liquid and solid wastes generated by refined oil and product tank bottom reclaimers***:
- Used equipment lubrication oils:
- Waste compressor oil, filters, and blowdown:
- Used hydraulic fluids;
- Waste solvents;
- Waste in transportation pipelinerelated pits;
- Caustic or acid cleaners;
- Boiler cleaning wastes;
- Boiler refractory bricks;
- Boiler scrubber fluids, sludges, and ash:
- Incinerator ash:
- Laboratory wastes;
- Sanitary wastes;
- Pesticide wastes;
- Radioactive tracer wastes;
- . Drums, insulation, and miscellaneous solids.
- Source: Federal Register, Wednesday, July 6, 1988, p.25,446 25,459.

See reverse side for explanation of oil and tank bottom reclaimer listings.

(rev. NMOCD 9/91)

See important note on 1990 disposal restrictions for non-exempt waste on reverse.

COMMERCIAL SURFACE DISPOSAL FACILITIES

SOUTHEAST

COMPANY	ORDER NO.	LOCATION	WASTE	DATE
Burro Pipeline	R-3238	Lane Salt Lake SI3 TIOS R32E	PW	1967
C & C	R-9769-A	S02 T20S R37E	LF	1993
CRI	R-9166	S27 T20S R32E	PW TP S M	1990
Daugherty	R-5464	Crosby Salt Lake S24 T08S R29E S19 T08S R30E	PW	1977
ESSR		S01 T26S R31E	LF	1993
Loco Hills	R-6811-A	S16 T17S R30E	PW TP	1982
Parabo	R-5516	S29 T21S R38E	PW TP S M	1977 1983
R & R Inc.		S05 T02N R01E	PW	1993
Unichem	R-7113	S26 T23S R29E	PW	1982
		NORTHWEST		
COMPANY	ORDER NO.	LOCATION	WASTE	DATE
Basin Disposal		S03 T29N R11W	PW	1985
Envirotech No. 1 Envirotech No. 2	 	S26 T27N R11W S06 T26N R10W	LF LF	1990 1992
SWWD		S04 T29N R09W	PW	1988
Sunco	R-9485-A	S02 T29N R12W	PW	1991
TNT Construction		S08 T25N R03W	PW LF	1990 1992
Tierra	R-9772	S02 T29N R12W	LF	1992

PW - Produced Water TP - Waste Oil Treating Plant S - Solids LF - Landfarm (Solids) M - Drilling Muds

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SEP 2 5 1995

NOTICE OF PUBLICATION CORRECTION

OIL CONSERT 1.1 REI . – (

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USEWS-NIMESSO STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT **OIL CONSERVATION DIVISION**

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

(GW-225) - Energy Air Drilling Service Co., Mr. Jerry Tufly, (505)-327-6801, P.O. Box 2783, Farmington, NM, 87499-2783 has submitted a Discharge plan application for their Farmington facility located in the SW/4 SE/4, Section 20, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. All effluent that may be generated at the facility will be collected in a closed top tank and transported offsite for disposal at an OCD approved facility; Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 50 feet with a total dissolved solids concentration of approximately 1125 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 19th day of September, 1995.

	STATE OF NEW MEXICO	
	NO EFFECT FINDING The described action will have no effect on listed species.]
1	Date <u>SEAL</u> October 2, 1995 WILLIAM J. LEMAY, Director	l
	Consultation # Approved by U.S. FISH and WHDLIFE SERVICE NEW MEXICO ECOLOGICAL SERVICES FIELD OFFICE ALBUQUERQUE, NEW MEXICO	

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

Notice is hereby given that pursuant to the New Mexico Water Quality Control Commission Regulations, the following discharge plan applicatin has been submitted to the Director of the Oil Conservation Division, 2040 S. Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

5. 1elephone (DD) 52/-7131. (GW-225)-Energy Air Drilling Service Company Mr. Jerry Tufly, (505) 327-6801, P.O. Box 2783, Farmington, New Mexico 87499-2783, has submitted an application for a discharge plan for the Farmington Service Facility tocated in the SW/4 SE/4 of Section 20, Township 29 North, Range 12 West, MMPM, Sen Juan County, New Mexico. All effluent that may be generated at the facility will be collected in a closed top tank and transported offsite for disposal at an OCO approved facility; Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 50 feet with a total dissolved solids concentration of approximately plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Divi-sion shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest. If no hearing is held, the Director will

approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve or disapprove the plan based on the information in the plan and information presented at the hearing. GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 15th day of September, 1995. STATE OF NEW MEXICO

STATE OF NEW MEXICO OIL CONSERVATION DIVISION s/WILLIAM J. LEMAY, Director Journal: September 25, 1995.

STATE OF NEW MEXICO County of Bernalillo SS

Sworn and subscribed to before me, a notary Public in E STAT OFFICIAL SEAL and for the County of Bernalillo and State of New Corrina Duncan day of 1995 NOTARY PUBLIC Mexico, this_ 101 STATE OF NEW MEXIC -3-0 D wy Commission Expires: PRICE Statement to come at end of month. NOBT asser

CLA-22-A (R-1/93) ACCOUNT NUMBER

NOT:2E OF PUBLICATION STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to the New Mexico Water Quality Control Commission Regulations, the following discharge plan applicatin has been submitted to the Director of the Oil Conservation Division, 2040 S. Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131: (GW-225)-Oil and Gaa Air

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(GW-225)-Oil and Gas Air Drilling Services Company, Jerry Tuffy, Area Manager, P.O. Box 2783, Farmington, New Mexico 87498-2783, has submitted an application for a discharge plan for the Farmington Service Facility located in the SW/4 SE/4 of Section 20, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. Approximately 6 gallons per day of waste water is stored in a below ground, closed-top tank with secondary containment and a leek detection system prior to transport to an OCD approved disposel site. Ground water most likely to be affected in the event of an accidental discharge is at a depth of approximately 50 feet with a total dissolved solids concentration of 1150 mg/l. The discharge plan addresses how spilla, leaks, and other accidental discharges to the surface will be managed

BTAT

My Commission Expires:

be managed. Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viswed at the above address between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest

determines that mere is significant, public interest. If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve or disapprove the plan based on the information in the plan and information presented at the hearing. GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 15th day of Sentember 1995

Conservation Commission at Santa Fe, New Mexico, on this 15th day of September, 1995. STATE OF NEW MEXICO OIL CONSERVATION DIVISION sWILLIAM J. LEMAY, Director Journal: September 23, 1995.

STATE OF NEW MEXICO County of Bernalillo SS

an Sworn and subscribed to before me, a notary Public in OFFICIAL SEAL and for the County of Bernalillo and State of New Corrina Duncan 1995 ر_ day of D D Mexico, this NOTARY PUBLIC STATE OF NEW MEXICO

Statement to come at end of month.

CLA-22-A (R-1/93) ACCOUNT NUMBER ______

PRICE

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AFFIDAVIT OF PUBLICATION

No. 35343

STATE OF NEW MEXICO County of San Juan:

ROBERT LOVETT being duly sworn says: That he is the Classified Manager of THE DAILY TIMES, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES, a daily newspaper duly qualified for the purpose within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for publication on the following day(s):

Wednesday, September 27, 1995.

and the cost of publication was: \$61.02

On <u>9/28/95</u> ROBERT LOVETT appeared before me, whom I know personally to be the person who signed the above document.

my Beck

My Commission Expires March 21, 1998

April 2, 1996.

COPY OF PUBLICATION

Any interested person may obtain further information of approximately 1125 mg/L. The discharge plan application may be viewed at the above address plan or its modification of this notice during which comments may be submitted to the Director determines there is signification any bereficient of the Oil Conservation Division and the application of the oil conservation of the submit a total discover of the oil approximately 1125 mg/L. The discharge plan application of the oil conservation of the action application as been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131: (GW-225) - Energy AIr Drilling Service Co., Mr. Jerry Tufly, (505)-327-6801, P.O. Box 2783, Fa mington, NM, 87499-2783 has submitted a Discharge plan application for their Farmington facilit iocated in the SW/4 SE/4, Section 20, Township 29 North, Range 12 West, NMPM, San Juz County, New Mexico. All effluent that may be generated at the facility will be collected in a close to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximate to be affected by a spill, leak, or accidental discharge to the surface will be managed. Any interested person may obtain further information from the Oil Conservation Division and may above. The discharge plan application may be viewed at the above address between 8:00 ar, and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification of the Oil Conservation Division at the address give above. The discharge plan application may be viewed at the above address between 8:00 ar, and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification of the Oil Conservation Division shall allow at least thirk (30) days after the dar of publication of the Oil Conservation Division at the address give and seed on information available. If a public hearing is held, the director will approve or disapprove the proposed plan based o
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STATE OF NEW MEXIC OIL CONSERVATION DIVISIO
/s/ William J. LeMa WILLIAM LIEMAY Direct

Legal No. 35343 published in The Daily Times, Farmington, New Mexico, on Wednesday, September 27, 1995.

AFFIDAVIT OF PUBLICATION

No. 35320

STATE OF NEW MEXICO County of San Juan:

ROBERT LOVETT being duly sworn says: That he is the Classified Manager of THE DAILY TIMES, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES, a daily newspaper duly qualified for the purpose within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for publication on the following day(s):

Monday, September 25, 1995.

and the cost of publication was: \$63.56

On 9/28/95_ROBERT LOVETT appeared before me, whom I know personally to be the person who signed the above document.

My Commission Expires March 21, 1998 April 2, 1996.

COPY OF PUBLICATION



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

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SIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 15th day of September, 1995.

> STATE OF NEW MEXICO **OIL CONSERVATION DIVISION**

> > /s/ Deputy Director WILLIAM L. LEMAY, Director

SEAL

Legal No. 35320 published in the Daily Times, Farmington, New Mexico, on Monday, September 25, 1995.

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NOTICE OF PUBLICATION

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

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GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 15th day of September, 1995.

NO EFFECT FINDING The described action will have no effect on listed species, wetlands, or other important wildlife resources.
Date September 22, 1995
Consultation #
Approved by Junitar power to M
U.S. FISH and WILDLIFE SERVICE NEW MEXICO ECOLOGICAL SERVICES FIELD OFFICE ALBUQUERQUE, NEW MEXICO

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

RECEVEL

SEP 2 1 1995

Septing Director

WILLIAM J. LEMAY, Director

OIL CONSERVATION DIVISION

September 26, 1995

CERTIFIED MAIL RETURN RECEIPT NO. Z-765-963-067

Mr. Jerry Tufly Energy Air Drilling Service Co. P.O. Box 2783 Farmington, NM 87499-2783

RE: Discharge Plan GW-225 Energy Air Drilling Service Co., Farmington facility San Juan County, New Mexico

Dear Mr. Tufly:

The NMOCD has received the proposed Energy Air Drilling Service Co. discharge plan application for the facility located in SW/4 SE/4, Section 20, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. The NMOCD has prepared and sent out the public notice for the facility as stated in WQCC section 3-108 and has performed a preliminary review of the discharge plan proposed by Energy Air Drilling Service Co. signed by Mr. Jerry Tufly on September 8, 1995.

The following comments and request for additional information are based on the review of the Energy Air Drilling Service Co. application. Please note that unless otherwise stated, response to all comments shall be received and reviewed by the OCD prior to approval of the discharge plan application.

Refer to the application package as submitted by Energy Air Drilling Service Co. on September 8, 1995 as signed by Mr. Jerry Tufly.

I. Pursuant to WQCC section 3-114 Energy Air Drilling Service Co. is subject to the \$50 (fifty dollar) filing fee and the \$1,380 (One Thousand Three Hundred and Eighty Dollar) flat fee. The \$50 filing fee was not submitted with your application and the \$1,380 flat fee is due upon approval of your proposed discharge plan - further you may pay the flat fee in five equal payments of \$276 dollars each year over the five year length of the permit. The permit will be good for five years and at that point will have to be renewed.

II. The review that follows will site specific information from your application that needs to be clarified. Enclosed you will find several attachments which will be mentioned throughout this review. The service company guidelines that were provided to Mr. Tufly at the inspection will be referenced during this process. NOTE: Each category of the plan should use the roman numerals and headings as the guidelines do.

Mr. Jerry Tufly September 26, 1995 Page 2

A. ITEM III. of the guidelines - Location of Discharge.

Find the enclosed attachment No. 1 - This is a copy of a topographic map that shows the location of GW-225.

NOTE: Enclosed you find literature that explains exempt and non-exempt wastes in the oil patch. Energy Air Drilling Service Co. is encouraged to read the information and apply it at the yard as well as on location. (Attachment No. 2)

- B. ITEM IX. of the guidelines Proposed modifications.
 - 1. Use the enclosed NMOCD Guidelines fro construction of the wash area. (Attachment No. 3 and No. 4)
- C. ITEM X. of the guidelines. Inspection, Maintenance and Reporting.
 - 1. Attachment No. 5 is the NMOCD rule 116 and WQCC 1-203 for spill reporting include these reporting requirements as part of the discharge plan. In the event of a spill that is reportable according to the above rules contact the Aztec NMOCD office at 334-6178.
 - 3. Describe how precipitation/runoff will be managed according to part X. C. of the guidelines.
- D. ITEM XII. of the guidelines. Site Characteristics.
 - 1. Attachment No. 6 gives hydrogeologic information for the site of GW-225.
 - 2. If Energy Air Drilling Service Co. chooses the following groundwater report may be purchased from New Mexico Bureau of Mines and Mineral Resources Phone (505)-835-5410; "Hydrogeology and water resources of San Juan Basin, New Mexico." Hydrologic Report 6, 1983.
- E. ITEM XIII. of the guidelines. Other Compliance Information.

Attach the enclosures labelled XIII. A. and XIII. B. to the discharge plan.

Mr. Jerry Tufly September 26, 1995 Page 3

Submittal of the requested information and commitments in a timely fashion will expedite the final review of the application and approval of the discharge plan. Submit the information in three copies - two to Santa Fe, and one copy to Aztec.

If you have any questions, please feel free to call me at (505)-827-7156.

Sincerely.

Patricio W. Sanchez Petroleum Engineer

xc: Mr. Denny Foust - Environmental Geologist

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Receipt for



Certified Mail
 No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Sent to ENERBY AIN									
Street and No.									
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Return Receipt Showing to Whom, Date, and Addressee's Address									
TOTAL Postage & Fees	\$								
Postmark or Date	2								
	Sent to ENERBY A:N Street and No. P.O., State and ZIP Code Postage Certified Fee Special Delivery Fee Restricted Delivery Fee Restricted Delivery Fee Return Receipt Showing to Whom, Date, and Addressee's Address TOTAL Postage & Fees Postmark or Date								





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

	Location	Latitud e- Longitude	Number or name	Depth (feet)	Alti- tude (feet)	Depth to Water (feet)	Date	Producing interval (feet)	Principal water- bearing unit(s)	Specific conduct- ance (umhos at 25°C)	Date	Logs available	Reference	Draum down (feet)	Dis- charge (gal/ min)	Dura- tion (hours)	Remarka
	29.11.25.132	364158 1075653	Bur. Rec. #39	10M	5,470	1.8	04-16-68		Ta	6,300	04-16-68	-	-	·•	-	-	-
	29.11.30.211	364212 1080152	Narcian Archiberue	46	5.465	43	_		Qal	748 *	04-09-68	-	-	-	-	-	-
	20 11 20 222	364152 1050152	Dalbert Blake		5,405	9.5 8 R	04-09-68		Qal	886 🕈	04-09-68	-	•	-	-	-	-
	29.11.30.233	364043 1080337	Dervert blaks	1 700	5,350	-	_	_	Kpc	-	-	TOP	-	-	-	-	Converted to water.
	29.11.31.3342	364043 1080217	Edgar Lund	600	5,458	29.1	- 10-09-74	300	TKoa	-	-	-	-	-	-	-	Oil test plugge
	29.11.31.3424	364042 1080158	Richard Sezo	. 326	5,480	-	-	_	TKos	-	-	-	-	-	-	-	"Not fit to drink".
	29.11.34.4144	364046 1075827	-	800	5,640	-	-	-	Tioa	-	-	TOP	-	-	-	•	Source for H ₂ O injected; plugged back from TD of 1.355 fast.
7	29.12.06.133	364521 1080847	George McColm	16	5.440	6	11-24-53	-	Qal	2,250 =	11-24-53	-	8		10	-	·····
	29 12 07 4133	364417 1080817	7th Day Avent Church	 h 224	5 600	170.5	10-08-74	_	Kkf, TKoa	2,500	10-08-74	-	-	-	-	-	•
	29.12.16	-	Pan'Am Pet.	-	-	-	-	1,435-1,448	Крс	- *	• 04-30-59	-	2	-	-	-	TDS = 29,800 mg/L, 1959.
									Qal	2,100	04-05-68	-	-	-	-	-	-
	29.12.19.3211	364242 1086833	Thomas F. Kirby	62	5,360	43.4	04-05-68	•	Qal	900	04-05-68	-	-	-	-		
	29.12.19.3231	364235 1080837	Thomas F. Kirby	44	5,330	32.1	040568	-	Kpc	- •	590	-		-	-	-	Analysis only, TDS -
	29.12.20	-	-	-	-	-	-	1,550	•								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.
	20 12 21 3	-	-	-	-	-	-	-	-	4,090 **	03-15-74	-	-	-	-	· -	Analysis only.
	20.12.28	_	Pan An	_	_	-	-	-	Kpc	- +	04-30-59	-	-	-	-	-	Gas well; TDS 37_800 mg/1
	29.12.20	-		120	F 202	10 0	11-07-74	-	TKos	-	-	-	-	- '	-	•	Unused.
X	29.12.29	364215 1080609	Pan An	44	-		-	-	Qal	- •	04-30-59	-	P	-	• -	-	Reported casing depth; TDS = 2,210 mg/L.
	29.12.30	-	-	-	-	- '	-	1,240	ጂጋር	- •	59	-	٩	-	-		WBF depth = 1,240 ft; TDS = 45,600 mg/L.
						_	10-21-76	_	Kief	12,250	10-21-74	-	-	-	58	-	Resmond Canal Well.
	29.12.33.2411	364111 1080553	-	850	5,360	, , , , , , , , , , , , , , , , , , ,	10-21-74	-	Qal	2,950 •	04-17-68	-	-	-	- '	-	Stovepipe casing.
	29.12.34.421	364056 1080450	Bureau of Reclamation	138	5,370	2.3	04-17-06	-									
	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	6M	5,380	3.6	04-18-68	-	Qal	4,620 *	04-18-68	-	-	-	-	-	Stovepipe casing.
			Reclamation #26													Duta	Grand

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

Sec. 2

LOCATION	NAME	WELL NUMBER	USE	DEPTH	PERFORATIONS AQUIFER
·29.12.14.11	Trantham, Teddy O.	SJ-0548	dom, stk	180	•
29.12.15.143_	Kennedy, George L.	SJ-1510	dom	155	135-155
29.12.19.344	Horvath, Robert T.	SJ-0567	dom	28	
29.12.19.414	Brainard, Lee	SJ-0657	dom	85	
29.12.19.431	James, Truett C.	SJ-1070	dom, stk	38	· ·
29.12.19.44	Hanson, Gale	SJ-0953	dom	76	
29.12.20.333	Hammond, Bob	SJ-0338	dom, stk	28	
29.12.24.32	Murphy, John L.	SJ-1597	dom	40	
29.12.24.34	Thomason, James W.	SJ-0400	dom, stk	83	60-83
29.12.25.12	Sutherlen	SJ-0938	dom	80	
29.12.25.14	Cross, Frankie J.	SJ-0706	dom	49	
29.12.25.14	Kirby, Richard L.	SJ-0652	dom	42	
29.12.25.14	Runyan, Roy A.	SJ-1322	dom	42	
29.12.25.143	Palmer, Andrew L.	SJ-0617	dom	47	
29.12.25.24	Sierra, Raymond M.	SJ-1466	dom, stk	27	
29.12.25.31	Bradley, Davis	SJ-0570	dom	3 6	
29.12.25.43	Jacob, Lawrence	SJ-0763	dom	60	20-60
29.12.26.21	Roquemore, Dean	SJ-0777 ,	dom	47	
29.12.26.211	Dufur, Ralph L.	SJ-1109	dom	100	
29.12.26.24	Nunn, Ewing H.	SJ-1194	dom	38	
29.12.26.34	Durrett, James M.	SJ-0112	dom,stk	47	
29.12.26.42	Fielder, Charles E.	SJ-1802	dom	70	59-69
29.12.26.42	Osburn, Lewis R.	SJ-1326	dom	50	
29.12.26.422	Buck, Lee A.	SJ-1469	dom, stk	45	
29.12.26.422	Lozon, Lawrence J.	SJ-0399	dom	45	
29.12.27.13	Bustos, Daniel	SJ-1590	dom	63	
29.12.27.131	Reynolds, Ronald	SJ-0726	dom	50	
29.12.27.133	Chacon, Alfonso J.	SJ-0827	dom	55	
29.12.27.133	Kaiser, Charles	SJ-1008	dom	51	
29.12.27.134	Torres, Richard	SJ-0666	dom	35	
29.12.27.31	Bencomo, Joe	SJ-0572	dom	35	
29.12.27.31	Harmon, Douglas A.	SJ-1700	dom	87	
29.12.27.31	Palmer, Charlie W.	SJ-1728	dom	25	
29.12.27.311	Clark, Doris	SJ-1690	dom	25	
29.12.27.311	Orellano, Reynaldo W	SJ-0904	dom, stk	32	
29.12.27.313	Brewer, Gerald A.	SJ-0901	dom, stk	32	

81

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NOTICE OF PUBLICATION CORRECTION

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

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

(GW-225) - Energy Air Drilling Service Co., Mr. Jerry Tufly, (505)-327-6801, P.O. Box 2783, Farmington, NM, 87499-2783 has submitted a Discharge plan application for their Farmington facility located in the SW/4 SE/4, Section 20, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. All effluent that may be generated at the facility will be collected in a closed top tank and transported offsite for disposal at an OCD approved facility; Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 50 feet with a total dissolved solids concentration of approximately 1125 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 19th day of September, 1995.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION WILLIAM J. LEMAY, Director

SEAL

NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to the New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 2040 S. Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

ENERGY ALR DRILLING SERVICE CO., (GW-225) - Oil and Gas Air Drilling Services Company, Jerry Tufly, Area Manager, P.O. Box 2783, Farmington, New Mexico 87499-2783, has submitted an application for a discharge plan for the Farmington Service Facility located in the SW/4 SE/4 of Section 20, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. Approximately 6 gallons per day of waste water is stored in a below ground, closed-top tank with secondary containment and a leak detection system prior to transport to an OCD approved disposal site. Ground water most likely to be affected in the event of an accidental discharge is at a depth of approximately 50 feet with a total dissolved solids concentration of 1150 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve or disapprove the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 15th day of September, 1995.

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STATE OF NEW MEXICO OIL CONSERVATION DIVISION

Deping Director

WILLIAM J. LEMAY, Director

SEAL

managed.

District I - (P. O. Box 19: Hobbs, NM District II - 811 S. First Artesia, NM District III - 10 to Bra Aztec, NM 8 District IV -	(505) 393-6161 40 88241-1980 (505) 748-128 88211-0719 - (505) 334-61 azos Road 87410 - (505) 827-713	Energ RGE PI Refer to	Sy Miner C AN APF	ate o rals and Dil Con 2040 S Santa Fe (5 PLICATI uldelines	f New Natura servatic outh Pack , New M 505) 827- 005 FOF for assista	W M I Resc on Di heco St exico 8 7131 R OILF nco In c	exico ources D vision treet 7505	Departm ERVICE the applic	ent uoisi/ nee			Revised 4/18/95 Submit Original Plus 1 Copy IlOto Santa Fe Do appropriate District Office	
			😡 Ne	w		Renewa	al		Modifica	tion			
1.	Type: <u>0i</u> l	<u>l</u> and	Gas A	Air Dri	lling	Servi	ces (Company	Y .				
2.	Operator:_	Dale	A. Re	ennels	Owner	⊉ho: : (₽.0	ne 97 . Box	241- 1866	-6029 Grand	Jct	. co.	8150)2)
	Address:	5633	U.S.	Hwy 64	Farm	ington	NM	87401	(P.O.	Вох	2783	8749	€ 99-2783)
	Contact Pe	rson:	Jerry	Tufly		e ser et bijder			I	Phone:	505-3	327-68	301
3.	Location:	SW ubmit lai	/4	SE	/4_Se	ction 2	0 xactilo	_Townsh	ip29		Range	12	
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, ∖	Attach a de	scriptio	n of all m	naterials s	ored or u	ised at th	e facilit	y	a tau Aritan Aritan				
7 .	Attach a de water must	escriptio be inclu	n of pres ided.	sent sourc	es of effi	Uent and	waste	solids. A	verage qu	uality a	nd daily	volume	of waste
8.	Attach a de	scriptio	n of curre	ent li quid a	ind solid	waste col	lection	treatman	Vdisposa	l proce	dures.		
9.	Attach a de	scriptio	n of prop	osed mod	ifications	to existin	ig colle	ction/trea	tment/dis	posal s	systems.		
10.	Attach a roi	utine ins	spection	and maint	enance p	lan to ens	sure pe	rmit com	pliance,				
11.	Attach a co	ntringer	ncy plan	for reporti	ng and cl	ean-up of	spills	or release	s.				
12.	Attach geol fresh water.	logical/h . Depth	ydrologi to and c	cal eviden juality of g	ce demo round wa	nstrating Iter must	that dis be inclu	posal of uded.	oil field v	vastes	will not :	adversel	y impact
13.	Attach such and/or orde	n other i ers.	nformati	on as is n i	ecessary	to demor	nstrate	complian	ce with a	ny othe	er OCD i	rules, re	gulations
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	Name:	Jerry	Tufl	У			Title:_	Area	Manag	ger			
	Signature:	4.	l. 1	if			Date:_	9-	8-19	95			±,,



ATTACHMENT IV:

W.E.L. 4108 OLD MISSION ROAD FARMINGTON, NM 87401



ATTACHMENT



ATTACHMENT VI :

DRILLING CHEMICALS:

Product Name Solid	(S)	Description	Pac	ckaging		Est.
Liquid	(L)				Ţ	<i>lolumes</i>
Drillfoam F-450	L	Drilling Foamer	55	gallon	drum	550g.
Drillfoam F-485	L	Drilling Foamer	55	gallon	drum	220g.
Drillcor DC-305	L	Corrosion Inhibitor	55	gallon	drum	110g.
Drillvis DV-1100	L	Polymer/Viscosi	5	gallon	pail	100g.
Shale Trol ST	L	Shale Stabilizer	55	gallon	drum	220g.
KCL-1	L	KCL Substitute	55	gallon	drum	110g.

All drilling chemicals are stored on the south side of shop #10 on the facility drawing Attachment V:.

All of the above are products of:

Bachman Drilling & Production Specialties, Inc. 2220 South Prospect Oklahoma City, OK 73147 (405) 677-8296

LUBRICANTS AND FUELS:

Product	Name	Solid(S) Description	Packaging	Est.
		Liquid(L))	V	olume
Shell		\mathbf{L}	DONAX (R) TG Fluid	55 gallon drum	55g.
Shell		${\tt L}$	Rotella (R) T Oil 30wt	55 gallon drum	55g.
Shell		${\tt L}$	Rotella (R) T Oil 40wt	55 gallon drum	55g.
Mobil		${\tt L}$	Rarus 826	55 gallon drum	55g.
Shell		${\tt L}$	Shellzone antifreeze	1 gallon jugs	12g.
Shell		L	#2 diesel fuel	2/500 gallon tan	ks
N/A		\mathbf{L}	Used Oil	500 gallon tan	k
Safety	Kleen	\mathbf{L}	Solvent/parts washer	35 gallon drum	16g.

All oil's are stored on the south side of shop #7 on facility drawing ATTACHMENT V:.

All diesel fuel stored on the south side of shop #4 & #5 on facility drawing ATTACHMENT V:.

All anti-freeze and Safety Kleen parts washer stored in the shop #3 on the facility drawing ATTACHMENT V:.

All used oil stored on south side of shop #6 on facility drawing ATTACHMENT V:.

MATERIAL SAFETY DATA SHEET FOR U.S.A. AND CANADA

SECTION 1 -- PRODUCT AND PREPARATION INFORMATION

PRODUCT INFO	RMATION											
IDENTITY (1	TRADE NAME):	SAFET	SAFETY-KLEEN PREMIUM SOLVENT									
SYNONYMS:		Petrole	Petroleum Distillates; Petroleum Naphtha; Stoddard Solvent; Naphtha, Solvent									
SK PART NU	MBER(S):	6605										
FAMILY/CHI	EMICAL NAME:	Petrole	Petroleum hydrocarbon									
PRODUCT U	PRODUCT USE: Cleaning and degreasing metal parts. If this product is used in combination with other chemicals, refer to the Mat Safety Data Sheets for those chemicals.							he Material				
24-HOUR EMER	GENCY TELEPHONE		MEDICAL	:			TRANSPO	RTATION:				
These numbers ar	re for emergency use	1-8	00-752-78	69 (U.S.A.)		1-70	8-888-46	60 (U.S.A	A.)			
only. If you desir information about	only. If you desire non-emergency information about this product,			69 (CANAI	DA)	SAFETY-KLEEN ENVIRONMEN HEALTH AND SAFETY DEPART			MENT, PARTMENT			
please call a telep listed below.	hone number	RUSH F CHICA	OISON CO GO, ILLINO	NTROL CENT DIS, U.S.A.	rer	1-613-996-6666 (CANADA) CANUTEC						
PREPARATION I	INFORMATION	Safety-Klee Quebec, Ca	en Canada I unada H77	Inc 3090 2J7	Blvd. Le Ca Telephone	arrefour - S number: 1	Suite 300 -800-363	- Chome -2260	dey Laval			
MSDS FORM	NO.: 82529			REVIS	ION DATE	5: July 8	, 1993					
ORIGINAL IS	SSUE DATE: Jan	nuary 7, 1993		SUPE	RSEDES:	March 18	, 1993					
PREPARED	BY: Product MSI	DS Coordinat	or	APPRO	OVED BY:	MSDS '	Task For	ce Chairn	nan			
TELEPHONE NUMBER: For Product Technical Information Call 1-312-694-2700 (U.S.A.); 1-800-363-2260 (Canada)												
	SI	ECTION 2	HAZ	ARDOUS	СОМРС	DNENTS						
				<u>OSHA</u>	PEL ¹	ACGI	<u>I TLV</u>	OTHER	DATA			
<u>NAME</u>	<u>SYNONYM</u>	<u>CAS NO.</u>	<u>WT%</u>	<u>TWA</u>	<u>STEL</u>	TWA	<u>STEL</u>	<u>LD^a</u>	<u>rc</u> p			
Distillates (petro- leum) hydrotreated light	Solvent naphtha (petroleum), heavy aliph., hydrotreated	64742-47-8	100	100 ⁰ ppm	N.Av.	100 ⁰ ppm	N.Av.	>5000	>5500 ^c mg/m ³ /4 hours			
-												

N.Av. = Not Available ^aOral-Rat LD50 (mg/kg) ^bInhalation-Rat LC50 ^cFor Stoddard Solvent CAS 8052-41-3 ¹Reference source: 1910.1000 29 CFR Ch. XVII (7-1-92 edition)

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MATERIAL SAFETY DATA SHEET FOR U.S.A. AND CANADA

SECTION 3 -- EMERGENCY AND FIRST AID PROCEDURES

EYES:	For direct contact, flush eyes with water for 15 minutes lifting upper and lower lids occasionally. If irritation or redness from exposure to vapor or mist develops, move victim away from exposure into fresh air. Consult physician if irritation or pain persists.
SKIN:	Remove contaminated clothing and shoes. Wash skin twice with soap and water. Consult physician if irritation or pain persists.
INHALATION: (Breathing)	Remove to fresh air immediately. Use oxygen if there is difficulty breathing or artificial respiration if breathing has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.
INGESTION: (Swallowing)	Seek immediate medical attention. Do NOT induce vomiting. If spontaneous vomiting occurs, keep head below hips to avoid aspiration (breathing) into the lungs.
SPECIAL NOTE TO PHYSICIAN:	Treat symptomatically and supportively. Administration of gastric lavage, if warranted, should be performed by qualified medical personnel. Contact Rush Poison Control Center (see Section 1) for additional medical information

SECTION 4 -- HEALTH HAZARD DATA AND TOXICOLOGICAL PROPERTIES

PRIMARY ROUTES OF EXPOSURE:

Eye and skin contact; inhalation, ingestion.

EXPOSURE LIMITS:

See Section 2.

SIGNS AND SYMPTOMS OF EXPOSURE

ACUTE: Eyes: Contact with liquid or exposure to vapors may cause mild to moderate irritation with watering, stinging, or redness.

Skin: Contact with liquid or exposure to vapors tends to remove skin oils, possibly causing redness, drying and cracking, and burning, leading to dermatitis. No significant skin absorption hazard.

Inhalation (Breathing): High concentrations of vapor or mist may irritate the eyes and respiratory tract. High concentrations of vapor or mist may cause nausea, vomiting, difficulty breathing, lung congestion, and heart attack. High concentrations of vapor or mist may cause headaches, dizziness, incoordination, numbness, unconsciousness, seizures, and other central nervous system effects, including death.

Ingestion (Swallowing): Low order of acute oral toxicity. May cause throat irritation, nausea, vomiting, cardiac injury with arrhythmias (irregular heartbeats), and symptoms of central nervous system effects as listed for *ACUTE Inhalation*. Breathing material into the lungs during ingestion or vomiting may cause mild to severe pulmonary (lung) injury and possibly death.

CHRONIC: Prolonged or repeated skin contact may cause drying and cracking, or dermatitis. Prolonged or repeated eye contact may cause conjunctivitis. Prolonged or repeated inhalation of high vapor concentration has been reported to cause liver and kidney effects, fatal bone marrow hypoplasia (incomplete bone marrow development), and intracerebral (brain) hemorrhage.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:	Individuals with pre-existing lung, liver, kidney, cardiac, central nervous system, or skin disorders may have increased susceptibility to the effects of exposure
CARCINOGENICITY:	Not applicable.
	Also see Section 9.
OTHER POTENTIAL HEALTH HAZARDS:	The following information is required by Canadian WHMIS regulations. Irritancy is covered in Signs and Symptoms of Exposure in Section 4. There is no known human sensitization, toxicologically synergistic product, reproductive toxicity, mutagenicity, or teratogenicity associated with this product as a whole.

MATERIAL SAFETY DATA SHEET FOR U.S.A. AND CANADA

SECTION 5 -- FIRE AND EXPLOSION HAZARD DATA

EMERGENCY RESPONSE GUIDE NUMBER:	27 Reference <i>Emergency Response Guidebook</i> (DOT P 5800.5)	
FIRE AND EXPLOSION HAZARDS:	Decomposition and combustion products may be toxic. Heated containers may rupture, explode, or be thrown into the air. Not sensitive to mechanical impact. Material may be sensitive to static discharge, which could result in fire or explosion.	
FIRE FIGHTING PROCEDURES:	NFPA 704 Rating 1-2-0 (Health-Fire-Reactivity) Keep storage containers cool with water spray. Positive-pressure, self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide limited protection.	
EXTINGUISHING MEDIA:	Carbon dioxide, foam, dry chemical, or water spray.	
CONDITIONS OF FLAMMABILITY:	Heat, sparks, or flame.	
FLASH POINT:	148°F (64°C) Tag Closed Cup (minimum)	
AUTOIGNITION TEMPERATURE:	440°F (227°C) (minimum)	
FLAMMABLE LIMITS IN AIR:	LOWER: 1.0 Vol. % UPPER: 8.1 Vol. %	
HAZARDOUS COMBUSTION PRODUCTS:	Burning may produce carbon monoxide.	
SECTION 6 REACTIVITY DATA		
STABILITY:	Stable under normal temperatures and pressures, and not reactive with water.	

 INCOMPATIBILITY (MATERIALS AND CONDITIONS TO AVOID):
 Acids, bases, oxidizing agents, or chlorine may cause a violent reaction. Avoid heat, sparks, or flame.

 HAZARDOUS POLYMERIZATION:
 Not known to occur under normal temperatures and pressures.

 HAZARDOUS DECOMPOSITION PRODUCTS:
 None under normal temperatures and pressures.

SECTION 7 -- PREVENTIVE MEASURES

PRECAUTIONS FOR SAFE USE AND HANDLING

HANDLING PRECAUTIONS:	Keep away from heat, sparks, or flame. When transferring material, metal containers, including tank cars and trucks, should be grounded and bonded. Avoid contact with eyes, skin, clothing, or shoes. Use in well ventilated area and avoid breathing vapor or mist.
PERSONAL HYGIENE:	Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco products. Clean contaminated clothing, shoes, and protective equipment before reuse. Discard contaminated clothing, shoes, or protective equipment if they cannot be thoroughly cleaned.
SHIPPING AND STORING PRECAUTIONS:	Keep container tightly closed when not in use and during transport. Do not pressurize, drill, cut, heat, weld, braze, grind, or expose containers to flame or other sources of ignition. Empty product containers may contain product residue. See Section 9 for Packing Group information.

MATERIAL SAFETY DATA SHEET FOR U.S.A. AND CANADA

SPILL PROCEDURES:	Remove all ignition sources. Stop leak if you can do it without risk. Wear protective equipment specified in Section 7, CONTROL MEASURES. Ventilate area and avoid breathing vapor or mist. Water spray may reduce vapor, but it may not prevent ignition in closed spaces. For large spills, isolate area and deny entry; dike far ahead of liquid spill for later disposal. Contain away from surface waters and sewers. If possible, contain as a liquid for possible re-refining or sorb with compatible sorbent material and shovel with a non-sparking tool into closable container for disposal. See <i>Emergency Response Guidebook</i> (DOT P 5800.5) Guide Number 27 for more information.	
WASTE DISPOSAL METHODS:	Dispose in accordance with federal, state, provincial, and local regulations. Contact Safety-Kleen regarding recycling or proper disposal.	
CONTROL MEASURES		
EYE PROTECTION:	Where there is likelihood of eye contact, wear chemical goggles and faceshield. Do NOT wear contact lenses.	
PROTECTIVE GLOVES:	Use Nitrile, Viton ^{\oplus} , or equivalent gloves to prevent contact with skin. Do NOT use Butyl rubber, natural rubber, or equivalent gloves.	
RESPIRATORY PROTECTION:	Use NIOSH/MSHA-approved respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limit. A self-contained breathing apparatus (SCBA) and full protective equipment are required for large spills or fire emergencies. Selection and use of respiratory protective equipment should be in accordance in the U.S.A. with OSHA General Industry Standard 29 CFR 1910.134 or in Canada with CSA Standard Z94.4-M1982.	
ENGINEERING CONTROLS:	Provide process enclosure or local ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where explosive mixtures may be present, systems safe for such locations should be used.	
OTHER PROTECTIVE EQUIPMENT:	Where spills and splashes are possible, wear appropriate solvent-resistant boots, apron, or other protective clothing. Clean water should be available in work areas for flushing the eyes and skin.	
SECTION 8 PHYSICAL DATA		

PHYSICAL STATE, APPEARANCE AND ODOR:	Liquid, clear, colorless, with characteristic hydrocarbon odor.
ODOR THRESHOLD:	30 ppm (based on Stoddard Solvent)
SPECIFIC GRAVITY:	0.78 to 0.82 (60°/60°F) (15.6°/15.6°C) (water = 1)
DENSITY:	6.5 to 6.8 lb/US gal (780 to 820 g/l)
VAPOR DENSITY:	5.3 to 6.2 (air = 1)
VAPOR PRESSURE:	1 to 2 mm Hg at 68°F (20°C)
BOILING POINT:	350° to 470°F (177° to 244°C)
FREEZING POINT:	-33°F (-36°C) (approximately)
pH:	Not applicable.
VOLATILE ORGANIC COMPOUNDS: (US EPA DEFINITION)	100 WT%; 6.5 to 6.8 lb/US gal; 780 to 820 g/l
EVAPORATION RATE:	less than 0.1 (butyl acetate $= 1$)
SOLUBILITY IN WATER:	Slight.

Revision 7/93; Form No. 82529 - Page 4 of 5

MATERIAL SAFETY DATA SHEET FOR U.S.A. AND CANADA

COEFFICIENT OF WATER/OIL DISTRIBUTION:

Not available.

MOLECULAR WEIGHT:

155 to 180

SECTION 9 -- OTHER REGULATORY INFORMATION

TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME:	COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA)
DOT CLASS:	Combustible Liquid
DOT ID NUMBER:	NA1993 PG III
TDG CLASSIFICATION:	Not regulated.
SARA TITLE III:	Product does not contain toxic chemicals subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.
	Product poses the following physical and health hazards as defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986:
	Immediate (Acute) Health Hazard Delayed (Chronic) Health Hazard Fire Hazard
WHMIS CLASSIFICATION:	B3, Flammable and Combustible Material, Combustible Liquids; D2B, Poisonous and Infectious Material, Materials Causing Other Toxic Effects, Toxic Material
TSCA:	All of the components for this product are listed on, or are exempted from the requirement to be listed on, the TSCA Inventory.
CALIFORNIA:	This product is not for sale or use in the State of California.

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either expressed or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet apply to the material as supplied to the user.
ATTACHMENT VII :

Waste water comes from the cleaning of our vehicles and equipment. The average amount of water used on a daily basis is 6 gallons per day. Most of our equipment is cleaned at the well site but on occasions equipment must be cleaned in the yard.

In the shop we use a Safety Kleen parts washer. This unit is under contract with Safety Kleen for maintenance and removal of spent cleaning fluid. 16 gallons removed every 3 months.

Used motor oil is placed in a 500 gallon tank with secondary containment. This oil is burned in our used oil heater. 150 gallons / month average.

Used oil filters are crushed removing 95% of the free oil and put into sealable drum and picked up by Safety Kleen Corp..

Paint waste is left out to dry then cans are crushed and sent to the landfill.

Used drums are returned to the supplier for refund of deposit.

ATTACHMENT VIII :

Waste water from the cleaning of equipment and vehicles would be contained in a proposed wash pad and waste water containment system. The majority of this fluid would be lost to evaporation, if volumes become to high we would use an approved disposal site or install a water recycling system.

Used oil is stored in our 500 gallon tank and burned in a used oil burner. If the volumes of used oil becomes to high an oil recycler would be called for removing and recycling.

Used filters are crushed with a Grays Automotive filter crusher removing 95% of any free fluids remaining in the filters, these filters are then placed in a drum provide to us by Safety Kleen Corp. when these drums are full they are removed from our shop by Satey Kleen Corp. and are interred into their recycling program.

Used paint cans are dried then crushed and sent to the county landfill.

Used oil drums are returned to the various oil suppliers for deposit and/or recycled through their recycling program.

ATTACHMENT IX :

A re-enforced concrete wash pad sloped so that wash water would drain to a 500 to 1000 gallon containment tank with secondary containment. Approximate dimensions for this pad are 20'x40' and would be located off the southwest end of the shop. This wash pad would be completed in 3 to 4 years and location could change depending on local building and zoning codes.

As stated before the waste water from the wash pad would be collected in a 500 to 1000 gallon closed tank, most of the volumes used would be lost to evaporation, but should volumes become to high wash water would be suctioned off and disposed of at a proper disposal site.

A re-enforced concrete pad with a secondary containment lip and slopped to a central collection point, would be built adjacent to the current storage for diesel fuel 500 gallon taxed, 500 gallon non-taxed and 500 gallon used oil storage.

All the above are subject to local building and zoning code approval and land lord approval.

Please see attached drawings for proposed locations.



ATTACHMENT X :

A visual inspection of the storage areas will be conducted on a daily basis during the work week.

All valuing and piping will be inspected on a semi-annual basis. And replaced as needed.

All sumps will be cleaned and inspected with written documentation on an annual basis.

ATTACHMENT XI :

Any leakage or spill would only occur in three areas. In all of these areas there is a secondary containment system in place by means of concrete or steel containment. In either case no damage to surface or ground water would occur.

All areas are visually inspected on a daily basis. In the event of any significant leaks immediate notification to the local OCD director will be made. Immediate usage of a vacuum truck and hauled to a proper disposal site.

ATTACHMENT XII :

Soil types for this facility are a sand and clay mixture and a sandstone base ranging from 3' to 5' depending on the area of the area of the facility in which work is being done.

The nearest surface water is the San Juan River approximately 1/4 mile to the south of our facility.

No ground water would be affected by any discharge, all areas of storage have secondary containment.

STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION 2040 S. PACHECO SANTA FE, NEW MEXICO 87505 (505) 827-7131

June 1, 1995

4

CERTIFIED MAIL RETURN RECEIPT NO.Z-765-962-689

Mr. Jerry Tufly ENERGY AIR DRILLING SERVICE CO. P.O. BOX 2783 Farmington, NM 87499-2783

RE: Discharge Plan Requirement Farmington Facility San Juan County, New Mexico

Dear Mr. Tufly:

Under the provision of the Water Quality Control Commission (WQCC) Regulations, ENERGY AIR DRILLING SERVICE CO. is hereby notified that the filing of a discharge plan is required for the facilities located at 5633 HWY 64 in Farmington, New Mexico.

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

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

Mr. Jerry Tufly June 1, 1995 Page 2

A copy of the regulations and guidelines have been provided to ENERGY AIR DRILLING SERVICE CO. at a recent field inspection by OCD staff. Enclosed ENERGY AIR DRILLING SERVICE CO. will find an application form to be used with the guidelines for the preparation of discharge plans at oil & gas service companies. The guideline addresses berming of tanks, curbing and paving of process areas susceptible to leaks or spills and the disposition of any solid wastes.

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

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

If there are any questions on this matter, please feel free to contact Patricio Sanchez at 827-7156 or Roger Anderson at 827-7152.

Sincerely, William J. LeMay Director

WJL/pws

XC: OCD Aztec Office