

NM1 -

6

# GENERAL CORRESPONDENCE

YEAR(S):

2002



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor  
Betty Rivera  
Cabinet Secretary

February 11, 2002

Lori Wrotenbery  
Director  
Oil Conservation Division

Mr. Ken Marsh  
Controlled Recovery, Inc.  
P.O. Box 388  
Hobbs, NM 88241-0388

**RE: February 6, 2002 letter**

Dear Mr. Marsh:

The New Mexico Oil Conservation Division (OCD) has received the Controlled Recovery, Inc. (CRI) letter dated February 6, 2002. Enclosed please find the EPA waste classification O&G exploration and production wastes as to what is exempt and what is not exempt and the OCD mixture policy. Regarding Rule 711 Please review the highlighted portion of the rule below:

**19.15.9.711 APPLICABLE TO SURFACE WASTE MANAGEMENT FACILITIES ONLY**

- A. A surface waste management facility is defined as any facility that receives for collection, disposal, evaporation, remediation, reclamation, treatment or storage any produced water, drilling fluids, drill cuttings, completion fluids, contaminated soils, bottom sediment and water (BS&W), tank bottoms, waste oil or, upon written approval by the Division, other oilfield related waste. **Provided, however, if (a) a facility performing these functions utilizes underground injection wells subject to regulation by the Division pursuant to the federal Safe Drinking Water Act, and does not manage oilfield wastes on the ground in pits, ponds, below grade tanks or land application units, (b) if a facility, such as a tank only facility, does not manage oilfield wastes on the ground in pits, ponds below grade tanks or land application units or (c) if a facility performing these functions is subject to Water Quality Control Commission Regulations, then the facility shall not be subject to this rule.**

Please let me know if you have any additional questions. I can be reached at (505) 476-3488.

Sincerely

Martyne J. Kielling  
Environmental Geologist

Xc with attachments: Hobbs District

**HOLLAND & HART** LLP  
ATTORNEYS AT LAW

DENVER • ASPEN  
BOULDER • COLORADO SPRINGS  
DENVER TECH CENTER  
BILLINGS • BOISE • CASPER  
CHEYENNE • JACKSON HOLE  
SALT LAKE CITY • SANTA FE  
WASHINGTON, D.C.

P.O. BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
110 NORTH GUADALUPE, SUITE 1  
SANTA FE, NEW MEXICO 87501-6525

TELEPHONE (505) 988-4421  
FACSIMILE (505) 983-6043

Michael H. Feldewert

mfeldewert@hollandhart.com

September 9, 2002

**VIA HAND DELIVERY**

**This Document Is Provided For Settlement Purposes Only  
and Shall Not Be Admissible for Any Purpose.**

David K. Brooks, Legal Bureau  
New Mexico Energy, Minerals & Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

***Re: Controlled Recovery Inc. v. Williams, et al.  
Closure Plan – Settlement Discussions***

Dear Mr. Brooks:

CRI appreciates the Division's participation in the recent settlement efforts initiated by Secretary Betty Rivera. I remain hopeful that a resolution can be reached without the need for further involvement by the court. As a result, we will refrain from conducting the discovery afforded by the court until such time as these settlement efforts have been exhausted.

On September 15, 2000, CRI submitted to the Division for settlement discussions a detailed closure plan. CRI informed the Division in its cover letter that once the closure plan was approved, CRI would obtain third-party bids on the costs. *See Rule 711.B(1)(i)* (cost estimates to close a surface waste management facility must be "based upon the use of the equipment *normally available to a third party contractor.*") Included with CRI's proposed closure plan were supporting letters from a hydrogeologist, a geological engineer, and an environmental consultant stating that the tasks outlined in CRI's plan were sufficient to protect the public health and environment in this unique geologic area. *See Rule 711.b(1)(i)* (requiring a closure plan to be "sufficient to close the facility to protect public health and the environment"). *See also* Division Order No. R-9166 at ¶ 10 (identifying the unique geology underlying CRI's facility) and ¶ 17 (requiring a \$25,000 closure bond because of the unique geology of the area). As you know, CRI's site is remote to human population, future development is highly unlikely, the facility is located in an area that does not have groundwater sufficient for used by livestock or humans, impenetrable red beds underlie the facility, the site is not subject to any surface water run-on or run-off,

HOLLAND & HART LLP  
ATTORNEYS AT LAW

David K. Brooks, Legal Bureau  
September 9, 2002  
Page 2

and the nearest surface body of water (Laguna Toston north of the facility) is a salt water lake used for brine disposal by a potash mine.

The Division's August 6, 2002 response seeks to impose "additional requirements" to the proposed closure plan without indicating why these additional requirements are necessary to protect public health and the environment in this unique geologic area. Moreover, the Division has arbitrarily assigned costs to each task without indicating how these figures were derived or whether they are "based upon the use of the equipment normally available to a third-party contractor" as required by Rule 711.B(1)(i). As a result, CRI is concerned the Division's response is an arbitrary assignment of costs to a generic wish list of tasks that have no relationship to the unique geologies of the area and go beyond what is necessary to protect the public health and environment in this area.

Attached is a detailed response to the Division comments. CRI's response identifies the areas of disagreement and indicates where the Division's "additional requirements" are based on erroneous "assumptions" or unnecessary to protect the public health and environment. To the extent the Division disagrees with this analysis, CRI asks that the Division (a) identify the geologic, engineering or other data indicating why each "additional requirement" is necessary to protect the public health and environment in this unique geologic area, and (b) identify how the Division arrived at its cost figures for each of the enumerated tasks.

CRI remains committed to a closure plan that protects the public health and environment. However, the Division must realize that arbitrary bonding requirements go beyond what is necessary to protect the public health and environment in this unique area unfairly affect CRI's balance sheet and CRI's ability to borrow the money it needs to continue to service the industry. I remain hopeful that once the Division responds in a more detailed fashion to CRI's comments, the parties will be able to reach agreement on a closure plan and bond amount that protects the public health and environment in this unique area and reflects third-party cost estimates as required by Rule 711.B(1)(i).

Sincerely,



Michael H. Feldewert

MHF/js

Enclosure

cc: Secretary Betty Rivera  
Ken Marsh, Controlled Recovery, Inc.



**CRI's RESPONSE TO THE DIVISION'S COMMENTS**  
**ON A PROPOSED CLOSING PLAN**  
(September 9, 2002)

**Task 1:**     Lock gates, post closed, no trespassing signs. No new material will be acceptable.

**OCD Comments:** Task 1 must include notification of the OCD. The OCD Santa Fe and Hobbs offices must be notified when operation of the facility is to be discontinued.

**CRI Response:**     CRI has no disagreement with these requirements.

**Task 2:**     Drain water from produced water receiving tanks, pits 1a and 1b (lined skim pits) to 3a. Remove residue from 3-750 bbl. tanks to 2a and 2b for drying.

**OCD Comments:** The OCD must assume that all pits and tanks are full of fluid/sludge. What cannot be managed on site must be hauled to an offsite disposal facility.

Pit sludge disposal: \$1,320;  
Tank fluid transport and disposal: \$3,778.

**CRI Response:**     It is incorrect for the Division to "assume" that all pits and tanks will be full since they are not designed or constructed to be full. Moreover, the tanks at CRI's facility contain only produced water, which can easily be managed on site without transport and disposal costs. As Mr. Boyer (a hydrogeologist) noted in his report supporting CRI's closure plan, "high temperatures, low relative humidity, and an annual rainfall of approximately 9 inches enhance evaporation at the site."

**Task 3:**     Remove oil from treating plant to purchaser, drain all lines, remove untreated product to Pit 13.

**OCD Comments:** The OCD assumes that all tanks will be full of material that will either be considered a waste or will need treatment. Untreated tank bottoms or BS & W must be removed to another treating plant for treatment and recycling. This includes the material in pit 13 that is stored pending treatment/recycling.

Tank material:        \$17,877;  
Disposal costs:       \$7,150;  
Transport of 5500 bbl.:    \$25,027;  
Remove and recycle material in pit 13

estimated to be 1111 yd<sup>3</sup>: \$32,237.

**CRI Response:** It is incorrect for the Division to "assume" that all tanks will be full since tanks are not designed or constructed to be full. Moreover, the material in the tanks referenced is typically more than 50% water and therefore can easily be managed on site without transport and disposal costs. As Mr. Boyer (a hydrogeologist) noted in his report supporting CRI's closure plan, "high temperatures, low relative humidity, and an annual rainfall of approximately 9 inches enhance evaporation at the site." Finally, the transport and recycling costs are not justified or necessary to protect the public health and environment.

**Task 4: Allow fluids to evaporate and dry.**

**OCD Comments:** With pits full of fluid, evaporation and infiltration will take 2 years. The facility will have to be monitored 7 days a week for 2 years to ensure berm integrity is maintained, monitor H<sub>2</sub>S and ensure that no illegal dumping is occurring.

Monitoring cost: \$28,538.

**CRI Response:** The pits at CRI's facility have never been "full of fluid" and there is no factual basis for concluding that it will take two years for the required drying. As Mr. Boyer (a hydrogeologist) noted in his report supporting CRI's closure plan, "high temperatures, low relative humidity, and an annual rainfall of approximately 9 inches enhance evaporation at the site." Moreover, daily monitoring will not be required. Locked gates and fences approved by the Division exist at the site. Weekly monitoring will be sufficient. No H<sub>2</sub>S is generated at the site and therefore no monitoring of H<sub>2</sub>S is required.

**Task 5: Return unused boiler fuel to supplier.**

**OCD Comments:** The tanks, steel pits, pipe, boiler, equipment, used and unused chemicals, fuel, oil, and trash must be recycled or disposed of as applicable.

Equipment cleanup: \$16,000.

**CRI Response:** The equipment can be left in place if not sold to a third party. The equipment poses no threat to the public health or the environment.

**Task 6: Push pits 2a, b, c, 4, 5, 6, which have contained sump material, drilling mud, drill cuttings, work over solids, and other non-hazardous oilfield wastes into 3d. Scrape residue from 3a, 3b, and 3c, which have contained produced water and wash water, and move to 3d. Any liquids or viscous material will be**

**mixed with dry solids. Soil borings will be conducted in pits 3a, 3b, and 3c to determine vertical extent of hydrocarbons.**

**OCD Comments:** Soil samples must be taken and analyzed from the bottom and sidewalls of each of the pits and below tank footprints.

Forty samples at \$290 each and labor: \$14,240;  
Moving an estimated 1434 yd<sup>3</sup>: \$3,264;  
Moving an estimated 3958 yd<sup>3</sup> from Pit 3a, 3b, 3c: \$10,206.

**CRI Response:** CRI's consultants have recommended that soil samples be taken from the main liquids pits (3a, 3b, and 3c) in order to maintain a record in CRI's files. However, soil samples from the remaining pits and tanks are not necessary to protect the public health and environment due to the nature of those pits and tanks and the unique geology underlying this facility. As the Division determined, and as the expert reports submitted in support of this closure plan confirm, this facility is located in an area that does not have groundwater sufficient for used by livestock or humans, impenetrable red beds underlie the facility, the site is not subject to any surface water run-on or run-off, and the nearest surface body of water (Laguna Toston north of the facility) is a salt water lake used for brine disposal by a potash mine. Soil samples in this unique situation are not necessary to protect public health or the environment.

**Task 7:** Move liner and material from 1a and 1b to 3d.

**OCD Comments:** Material from 1a and 1b was covered in OCD's response to Task 2. The removal of the liner and remaining contaminated soil and analytical costs are in OCD reply to Task 6.

**CRI Response:** CRI directs the Division to its responses under Task 2 and Task 6.

**Task 8:** Move liner and materials from 16, which has contained bottom sediment with paraffin, to 3d.

**OCD Comments:** Tank bottoms or BS & W that contain recoverable hydrocarbons must be removed to another treating plant for treatment and recycling. This includes the material that is stored in pit 16.

Transport and recycle approximately 1481 yd<sup>3</sup>: \$44,390.

**CRI Response:** This material can easily be managed on site and there is no indication that any of this material is recoverable. The transport and recycling costs are not justified or necessary to protect the public health and environment.

**Task 9:** Move 7, 8, 9, 10, 11, and 12 which have contained sump material, drilling muck, drilling cuttings, work over solids, and other non-hazardous oilfield wastes, to 3d. Any liquids or viscous material will be mixed with dry solids.

**OCD Comments:** Moving and disposal of approximately 1721 yd<sup>3</sup>: \$4,468.

**CRI Response:** CRI agrees that moving and disposal costs will be incurred to move the material to Pit 3d, but does not understand the basis for the estimated cost of this task.

**Task 10:** Cover 3d with 12" caliche and coarse native material, contoured to prevent wind and water erosion.

**OCD Comments:** Pit 3d is within the east end of the larger pit 3 area. Design and construction of a landfill cap for Pit 3d must include the following: The pit must be filled and compacted with clean soil and then covered, compacted and mounded so that the location of the former pit will allow for positive drainage of precipitation. The cap must consist of a 12-inch intermediate cover material, 18-inch clay cap, and 6 inches of topsoil. A proposal using coarse material as the final layer to cap the landfill must be submitted to the OCD for review and approval. This proposal must include landfill industry-specific data as to the design and construction of caps using this material. Clean material to construct the cap may be acquired on site. The landfill cap must be allowed to stabilize and post-closure care period will be required.

Estimated 4685 yd<sup>3</sup> of cap material: \$12,425.

The remaining open portion of pit 3 must be filled in and domed so as not to act as an open collection point for precipitation or leachate that may seep from the waste pile and pond next to the buried waste.

Estimated 54,375 yd<sup>3</sup> of fill material: \$128,360.

**CRI Response:** 12" of cover for Pit 3d is adequate to prevent erosion in this area and no post-closure care is required to protect the public health and environment. As the Division determined, and as the expert reports submitted in support of this closure plan confirm, this facility is located in an area that does not have groundwater sufficient for used by livestock or humans, impenetrable red beds underlie the facility, the site is not subject to any surface water run-on or run-off, the area only receives approximately 9 inches of rain a year, and the nearest surface body of water (Laguna Toston north of the facility) is a salt water lake used for brine disposal by a potash mine. Indeed, the Division routinely allows reserve pits to be left on site in areas where groundwater is present with only a thin caliche cover or no cover at all.

The remaining portion of pit 3 does not require filling at the Division's estimated cost of \$128,000 to protect public health and the environment. As Mr. Boyer notes in his report, "high temperatures, low relative humidity, and an annual rainfall of approximately 9 inches enhance evaporation at the site." Any precipitation or seepage will quickly and easily evaporate. Moreover, the area is completely fenced and gated.

**Task 11:** Move material, liner, and nets from 13, which has contained bottom sediment and water, to solids area. Any remaining liquids or viscous material will be mixed with dry solids. Cap solids area with 12" caliche and coarse native material. Contoured to prevent wind and water erosion.

**OCD Comments:** Recycle material with usable oil cannot be disposed of. The contents of pit 13 must be transferred to another treating plant for treatment. See the response in Task 3.

Design and construction of a Landfill Cap for pit 15 must include the following:

The pit will be filled and compacted with clean soil and then covered, compacted and mounded so that the pit location will allow for positive drainage of precipitation. The cap must consist of a 12-inch intermediate cover material, 18-inch clay cap, and 6 inches of topsoil. A proposal using coarse material as the final layer to the cap the landfill must be submitted to the OCD for review and approval. This proposal must include landfill industry-specific data as to the design and construction of caps using this material. Clean material to construct the cap may be acquired on site. The landfill cap will be allowed to stabilize and a post-closure care period will be required.

Estimated 27,000 yd<sup>3</sup> of cap material and construction: \$64,300.

**CRI Response:** CRI directs the Division to its comments to Task 10. Moreover, this material can easily be managed on site and there is no indication that any of this material is recoverable. The transport and recycling costs are not justified or necessary to protect the public health and environment.

**Task 12:** Conduct NORM survey.

**OCD Comments:** The NORM survey must be conducted at the facility prior to removal of tanks, pipe, and equipment and prior to the moving of waste for burial.

NORM survey: \$648.

**CRI Response:** There is no disagreement with respect to this task.

**Task 13:** Record with Lea County clerk and notice that the site has been used as an oilfield disposal and treatment facility.

**OCD Comments:** The notice to the Lea County clerk must include a survey description of the location of all buried wastes on site.

**CRI Response:** There is no disagreement with respect to this task.

**Task 14:** OCD to inspect and release financial assurance obligation within 30 days of inspection.

**OCD Comments:** Upon OCD-approved final closure the financial assurance will be released.

**CRI Response:** Given the Division's two-year delay in responding to CRI's closure plan, a reasonable time limit should be set within which the Division must act and release the bond.

**Items not included in the above tasks:**

- 1) Plug and abandon 14 groundwater monitoring wells of approximately 815 feet total length: \$2,740;
- 2) Level berms and contour pits 1, 1b, 2a, 2b, 2c, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 16 so there will not be pit areas that would be available for unauthorized dumping: \$85, 947.

**CRI Response:** There are no groundwater monitoring wells at CRI's facility. Moreover, the leveling of berms and contour pits is already included within the Tasks addressing each of these pits. Since the areas is fenced and gated, there is no threat of unauthorized dumping in this area.



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**

Governor  
**Betty Rivera**  
Cabinet Secretary

August 26, 2002

**Lori Wrotenbery**  
Director  
Oil Conservation Division

Mr. Michael Felderwert  
Holland & Hart and Cambell & Carr  
P.O.Box 2208  
Santa Fe, NM 87504-2208

**Re: Case No. CV2001-310G**  
**District Court of Lea County, New Mexico**  
**5th Judicial District**  
***Controlled Recovery, Inc. v. Williams, et al.***

Dear Mike:

Reference is made to the recent telephone conference between EMNRD Secretary Betty Rivera and Controlled Recovery CEO Ken Marsh in which we participated.

Pursuant to Secretary Rivera's undertaking to furnish a response to Controlled Recovery's closure plan, the OCD staff has prepared a point-by-point evaluation, indicating additional requirements and our present estimates of cost for each enumerated "task."

This response is offered solely for the purposes of settlement negotiations, and we are furnishing the same to you based on our understanding of your agreement that the document will not be admissible in evidence for *any* purpose, whether or not it might be admissible for some purpose under NMRA 11-408. If this understanding is incorrect, we ask that you return the document to us and not deliver the same to your client.

It should also be understood that this is a preliminary evaluation and would not estop OCD from imposing additional requirements in the event actual closure were to occur.

Should you have any questions, please call me at (505)-476-3450.

Very truly yours,

David K. Brooks  
Assistant General Counsel

cc: Hon. Betty Rivera

The New Mexico Oil Conservation Division's response to Controlled Recovery Inc.'s closure plan submitted September 1, 2000.

**Task 1. Lock gates, post closed, no trespassing signs. No new material will be acceptable.**

Task 1 must include notification of the OCD. The OCD Santa Fe and Hobbs offices must be notified when operation of the facility is to be discontinued.

**Task 2. Drain water from produced water receiving tanks, pits 1a and 1b (lined skim pits) to 3a. Remove residue from 3-750 bbl. tanks to 2a and 2b for drying.**

The OCD must assume that all pits and tanks are full of fluid/sludge. What cannot be managed on site must be hauled to an offsite disposal facility.

Pit sludge disposal, **\$1,320.**

Tank fluid transport and disposal, **\$3,778.**

**Task 3. Remove oil from treating plant to purchaser, drain all lines, remove untreated product to Pit 13.**

The OCD assumes that all tanks will be full of material that will either be considered a waste or will need treatment. Untreated tank bottoms or BS&W must be removed to another treating plant for treatment and recycling. This includes the material in pit 13 that is stored pending treatment/recycling.

Tank material \$17,877 disposal costs \$7,150 to transport 5500 bbl., **\$25,027.**

Remove and recycle material in pit 13 estimated to be 1111 yd<sup>3</sup>, **\$32,237.**

**Task 4. Allow fluids to evaporate and dry.**

With pits full of fluid, evaporation and infiltration will take 2 years. The facility will have to be monitored 7 days a week for 2 years to ensure berm integrity is maintained, monitor H<sub>2</sub>S and ensure that no illegal dumping is occurring.

Monitoring cost, **\$28,538.**

**Task 5. Return unused boiler fuel to supplier.**

The tanks, steel pits, pipe, boiler, equipment, used and un-used chemicals, fuel, oil and trash must be recycled or disposed of as applicable.

Equipment cleanup, **\$16,000.**

**Task 6. Push pits 2 a, b, c, 4, 5, 6, which have contained sump material, drilling mud, drill cuttings, work over solids, and other non hazardous oilfield wastes into 3d. Scrape residue from 3a, 3b, and 3c, which have contained produced water and wash water, and move to 3d. Any liquids or viscous material will be mixed with dry solids. Soil borings will be conducted in pits 3a, 3b and 3c to determine vertical extent of hydrocarbons.**



Soil samples must be taken and analyzed from the bottom and sidewalls of each of the pits and below tank footprints.

Forty samples at \$290 each and labor, **\$14,240.**

Moving an estimated 1434 yd<sup>3</sup>, **\$3,264.**

Moving an estimated 3,958 yd<sup>3</sup> from Pit 3a, 3b, 3c, **\$10,206.**

**Task 7. Move liner and material from 1a and 1b to 3d.**

Material from 1a and 1b was covered in OCD's response to Task 2. The removal of the liner and remaining contaminated soil and analytical costs are in OCD reply to Task 6.

**Task 8. Move liner and materials from 16, which has contained bottom sediment with paraffin, to 3d.**

Tank bottoms or BS&W that contain recoverable hydrocarbons must be removed to another treating plant for treatment and recycling. This includes the material that is stored in pit 16.

Transport and recycle approximately 1481 yd<sup>3</sup>, **\$44,390.**

**Task 9. Move 7, 8, 9, 10, 11 and 12 which have contained sump material, drilling muck, drilling cuttings, work over solids, and other non-hazardous oilfield wastes, to 3d. Any liquids or viscous material will be mixed with dry solids.**

Moving and disposal of approximately 1721 yd<sup>3</sup>, **\$4,468.**

**Task 10. Cover 3d with 12" of caliche and coarse native material, contoured to prevent wind and water erosion.**

Pit 3d is within east end of the larger pit 3 area. Design and construction of a landfill cap for Pit 3d must include the following:

The pit must be filled and compacted with clean soil and then covered, compacted and mounded so that the location of the former pit will allow for positive drainage of precipitation. The cap must consist of a 12-inch intermediate cover material, 18-inch clay cap, and 6-inches of topsoil. A proposal using coarse material as the final layer to cap the landfill must be submitted to the OCD for review and approval. This proposal must include landfill industry specific data as to the design and construction of caps using this material. Clean material to construct the cap may be acquired ~~from~~ on site. The landfill cap must be allowed to stabilize and a post-closure care period will be required.

Estimated 4685 yd<sup>3</sup> of cap material, **\$12,425.**

The remaining open portion of pit 3 must be filled in and domed so as not to act as an open collection point for precipitation or leachate that may seep from the waste pile and pond next to the buried waste.

Estimated 54,375 yd<sup>3</sup> of fill material, **\$128,360.**

**Task 11. Move material, liner, and nets from 13, which has contained bottom sediment and water, to solids area. Any remaining liquids or viscous material will be mixed with dry solids. Cap solids area with 12" caliche and coarse native material. Contoured to prevent wind and water erosion.**

Recyclable material with usable oil cannot be disposed of. The contents of pit 13 must be transferred to another treating plant for treatment. See the response in Task 3.

Design and construction of a Landfill Cap for pit 15 must include the following:

The pit will be filled and compacted with clean soil and then covered, compacted and mounded so that the pit location will allow for positive drainage of precipitation. The cap must consist of a 12-inch intermediate cover material, 18-inch clay cap, and 6-inches of topsoil. A proposal using coarse material as the final layer to the cap the landfill must be submitted to the OCD for review and approval. This proposal must include landfill industry specific data as to the design and construction of caps using this material. Clean material to construct the cap may be acquired on site. The landfill cap will be allowed to stabilize and a post closure care period will be required.

Estimated 27,000 yd<sup>3</sup> of cap material and construction, **\$64,300.**

**Task 12. Conduct NORM survey.**

The NORM survey must be conducted at the facility prior to removal of tanks, pipe and equipment and prior to moving of waste for burial.

NORM survey, **\$648.**

**Task 13. Record with Lea County clerk and notice that the site has been used as an oilfield disposal and treatment facility.**

The notice to the Lea County clerk must include a survey description of the location of all buried wastes on site.

**Task 14. OCD to inspect and release financial assurance obligation within 30 days of inspection.**

Upon OCD approved final closure the financial assurance will be released.

**Items not included in the above Tasks.**

Plug and abandon 14 groundwater monitoring wells of approximately 815 feet total length **\$2,740**

Level berms and contour pits 1a, 1b, 2a, 2b, 2c, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 16 so there will not be pit areas that would be available for unauthorized dumping **\$85,947.**

Subtotal	\$477,888
NMGRT .058125	<u>\$ 27,778</u>
	\$505,666

Summary

**CRI Closure Cost Estimate**

Based on Volume of BS&W on Site on 25 July 2002

1.0 **BS&W**

Pump out storage tanks, haul to Pit 3ab	515 cy	\$3,260	
Clean tanks, 4 crew, 3 days, SCBA		\$3,500	
Pump out Pit 13, haul to Pit 3ab	1,810 cy	\$11,400	
Pump out Pit 16, haul to Pit 3ab	215 cy	\$1,360	
Blend, fertilize, and spread 18" deep	3,000 cy	\$5,000	
Till, fertilize twice in one year	3,000 cy	\$12,400	
			\$36,920

2.0 **Berm Material**

Pits 1,2,4,5,6 bulldozed into Pit 3d	2,200 cy	\$3,500	
Pits 7-9, 10-12, 16 loaded and trucked to Pit 3d	3,200 cy	\$5,280	
Pit 13 loaded and trucked to Pit 3d	750 cy	\$1,340	
Spread out and compact in Pit 3d to 6 ft depth	6,150 cy	\$9,840	
Cap w/ 12" caliche and red bed, compact	1,540 cy	\$8,000	
			\$27,960

3.0 **Landfill**

Cap 2 acres w/ caliche and red bed, compact	4,840 cy	\$20,200	
			\$20,200

4.0 **Misc**

Runon Control (diversion ditches @ Pit 3)		\$1,750	
Site Cleanup, gen'l, D-6, loader, truck (30 hrs)		\$2,640	
Mob/demob, 1 day for dozer, loader, low boys		\$2,350	
Soil samples, 8 ea, report		\$4,800	
Solid waste, liner and net scrap to landfill		\$2,500	
Reports, admin		\$4,520	
			\$18,560

**Total** = **\$103,640**

**Assumptions**

- BS&W treated on-site, haul to Pits 3ab, blend, spread, fertilize, till
- For volume of BS&W at treatment plant, use 50% of tankage volume
- For volume of BS&W in Pits 13 and 16, use actual volume found on 7/25/02
- Use 3,000 cy of BS&W after blending some soil and some loss from evaporation
- Caliche and red bed cap material sources ripped on-site at 1,500 cy per D-6 day
- Cap w/ red bed and caliche (start w/ 18" compact to 12"), no protectable GW
- Use 2 acres of landfill to be covered, area found on 7/25/02 also normal SOP
- 12 cy trucks @ \$60/hr; D-6 @ \$96/hr; loader @ \$78/hr; vacuum truck @ \$70/hr
- No reveg, tanks left clean and in place

*PR*

# Summary

## CRI Closure Cost Estimate

Maximum Allowed BS&W = 100 % of Pits 13 and 16 and Treatment Plant Tankage

### 1.0 BS&W

Pump out storage tanks, haul to Pit 3ab	1,030 cy	\$6,520	
Clean tanks, 4 crew, 3 days, SCBA		\$3,500	
Pump out Pit 13, haul to Pit 3ab	1,810 cy	\$11,400	
Pump out Pit 16, haul to Pit 3ab	860 cy	\$5,440	
Blend, fertilize, and spread 18" deep	5,000 cy	\$8,330	
Till, fertilize twice in one year	5,000 cy	\$20,670	
			\$55,860

### 2.0 Berm Material

Pits 1,2,4,5,6 bulldozed into Pit 3d	2,200 cy	\$3,500	
Pits 7-9, 10-12, 16 loaded and trucked to Pit 3d	3,200 cy	\$5,280	
Pit 13 loaded and trucked to Pit 3d	750 cy	\$1,340	
Spread out and compact in Pit 3d to 6 ft depth	6,150 cy	\$9,840	
Cap w/ 12" caliche and red bed, compact	1,540 cy	\$8,000	
			\$27,960

### 3.0 Landfill

Cap 2 acres w/ caliche and red bed, compact	4,840 cy	\$20,200	
			\$20,200

### 4.0 Misc

Runon Control (diversion ditches @ Pit 3)		\$1,750	
Site Cleanup, gen'l, D-6, loader, truck (30 hrs)		\$2,640	
Mob/demob, 1 day for dozer, loader, low boys		\$2,350	
Soil samples, 8 ea, report		\$4,800	
Solid waste, liner and net scrap to landfill		\$2,500	
Reports, admin		\$4,520	
			\$18,560

**Total =**

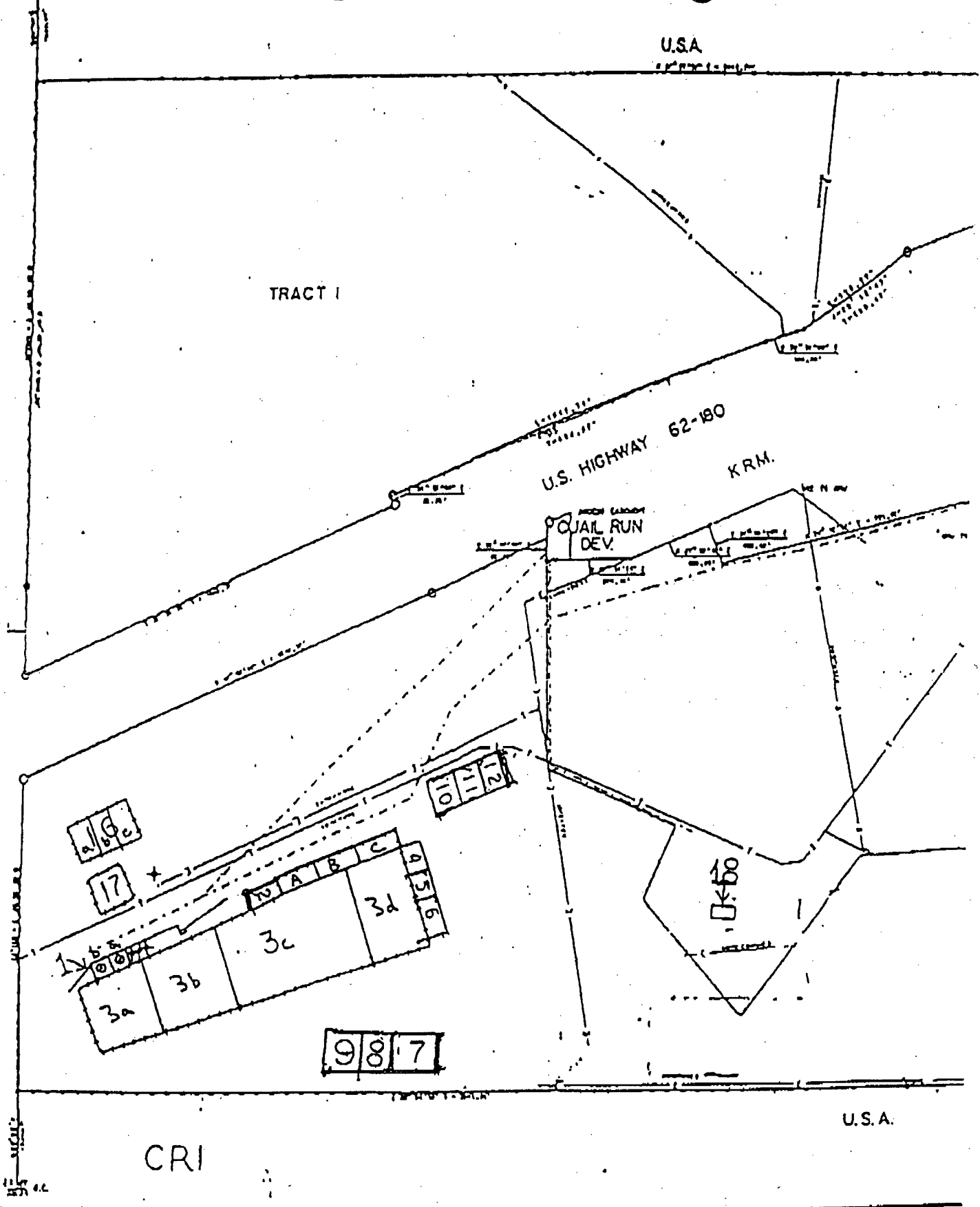
**\$122,580**

-TAX 7170  
129,750

### Assumptions

- BS&W treated on-site, haul to Pits 3ab, blend, spread, fertilize, till
- Use 5,000 cy of BS&W after blending some soil and some loss from evaporation
- Caliche and red bed cap material sources ripped on-site at 1,500 cy per D-6 day
- Cap w/ red bed and caliche (start w/ 18" compact to 12"), no protectable GW
- Use 2 acres of landfill to be covered, area found on 7/25/02 also normal SOP
- 12 cy trucks @ \$60/hr; D-6 @ \$96/hr; loader @ \$78/hr; vacuum truck @ \$70/hr
- No reveg, tanks left clean and in place

...ains 117,508 acres, more or less,  
with 50 feet being reserved as a ut



	EW	NS
P.T 10	80	60
11	65	55
12	50	50
	2195	
	(239)	(83)

P.T	16	EW	NS	Depth	
A		35	100	4' 0"	} 1555 yd <sup>3</sup>
B		35	100	4	
C		35	100	4	
		2105			
		(138)	(106)		

P.T	13	EW	NS	Depth
		120	110	5'
		(179)	(120)	

P.T	4	EW	NS	Depth
4		45	80	2 1/2
(4A)	5	40	65	2 1/4
6		35	55	2 1/2
		(644)	Σ 200	(248)

	EW	NS	Depth	
P.T 1	28	28	150/6	4 fluid
	30	30		
16	25	30	150/6	4 fluid

	EW	NS	Depth
7	93	68	2
(5A)	8	89	2 1/2
9	73	68	(3)

Σ 255

(82)

assume fluid dimensions



**THE REPRODUCTION OF  
THE  
FOLLOWING  
DOCUMENT ( S )  
CANNOT BE IMPROVED  
DUE TO  
THE CONDITION OF  
THE ORIGINAL**

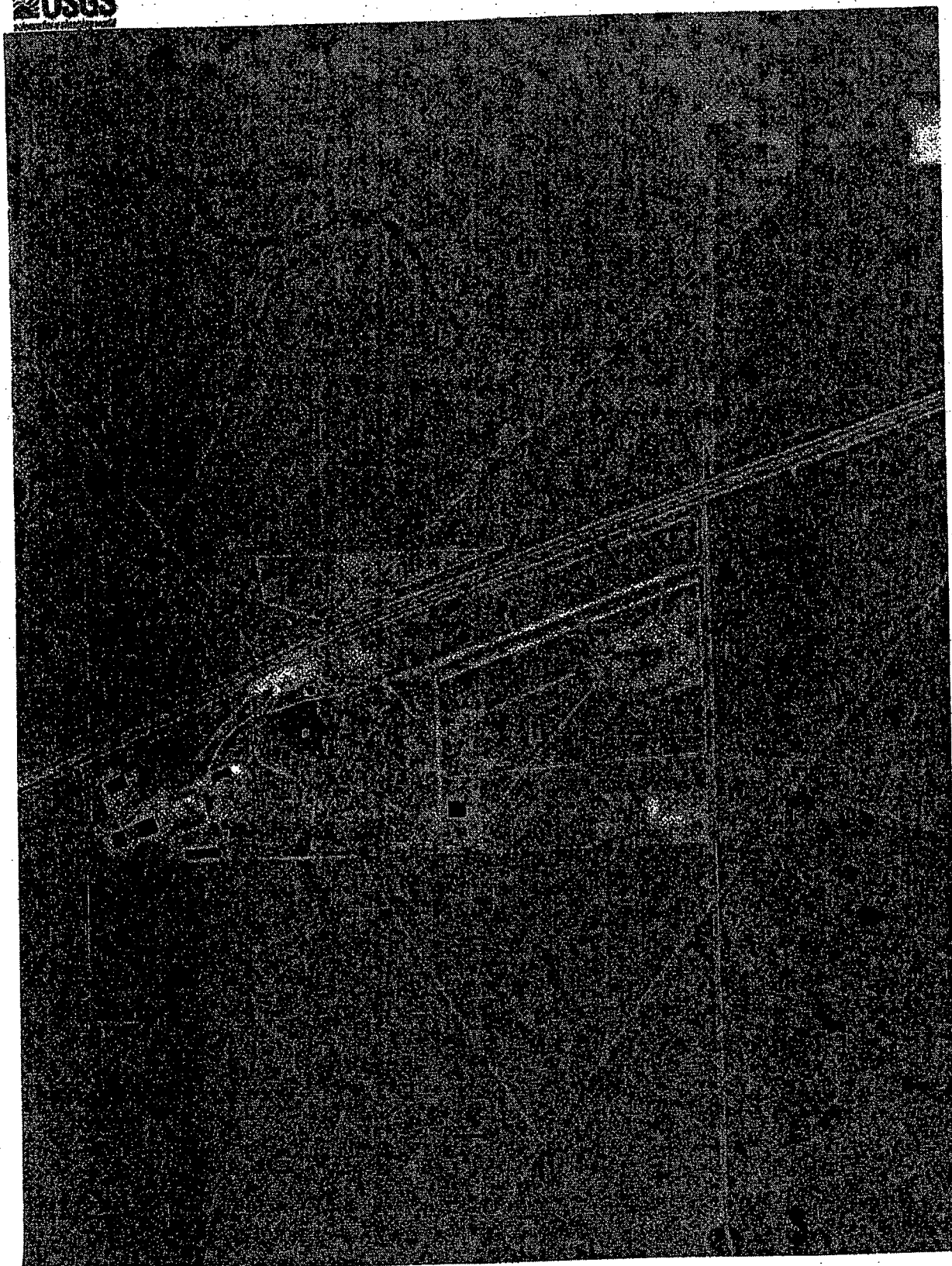


Microsoft TerraServer

Display Image

USGS Aerial Photograph

47 km E of Carlsbad, New Mexico, United States 22 Oct 1996



0 0.5Km

0 0.25Mi

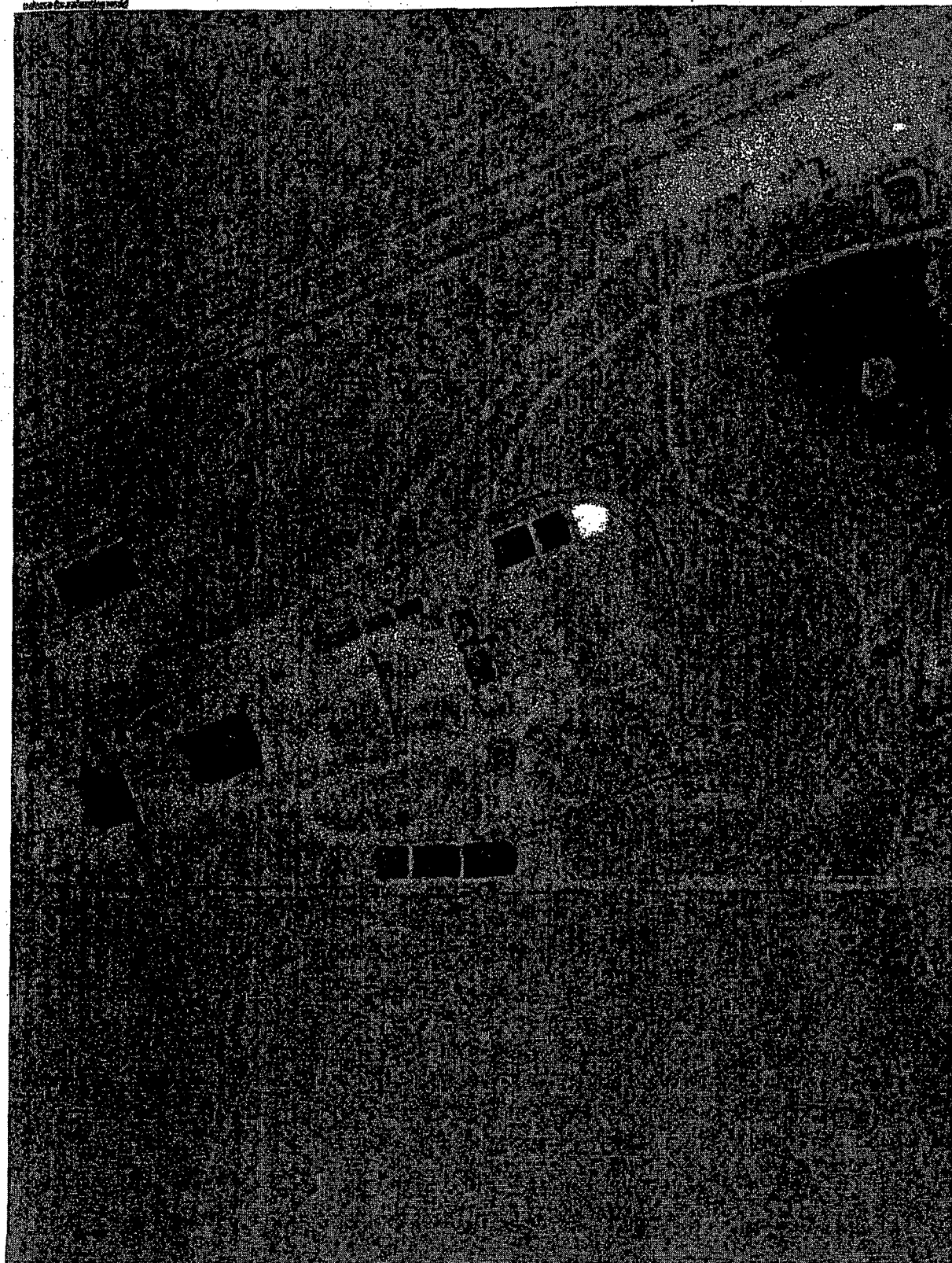
<http://terraserver.microsoft.com/printimage.asp?S=12&T=1&X=771&Y=4501&Z=13&W=1> 06/23/2000

Microsoft TerraServer

Display Image

USGS Aerial Photograph

46 km E of Carlsbad, New Mexico, United States 22 Oct 1996



0 100M

0 100yd





3d

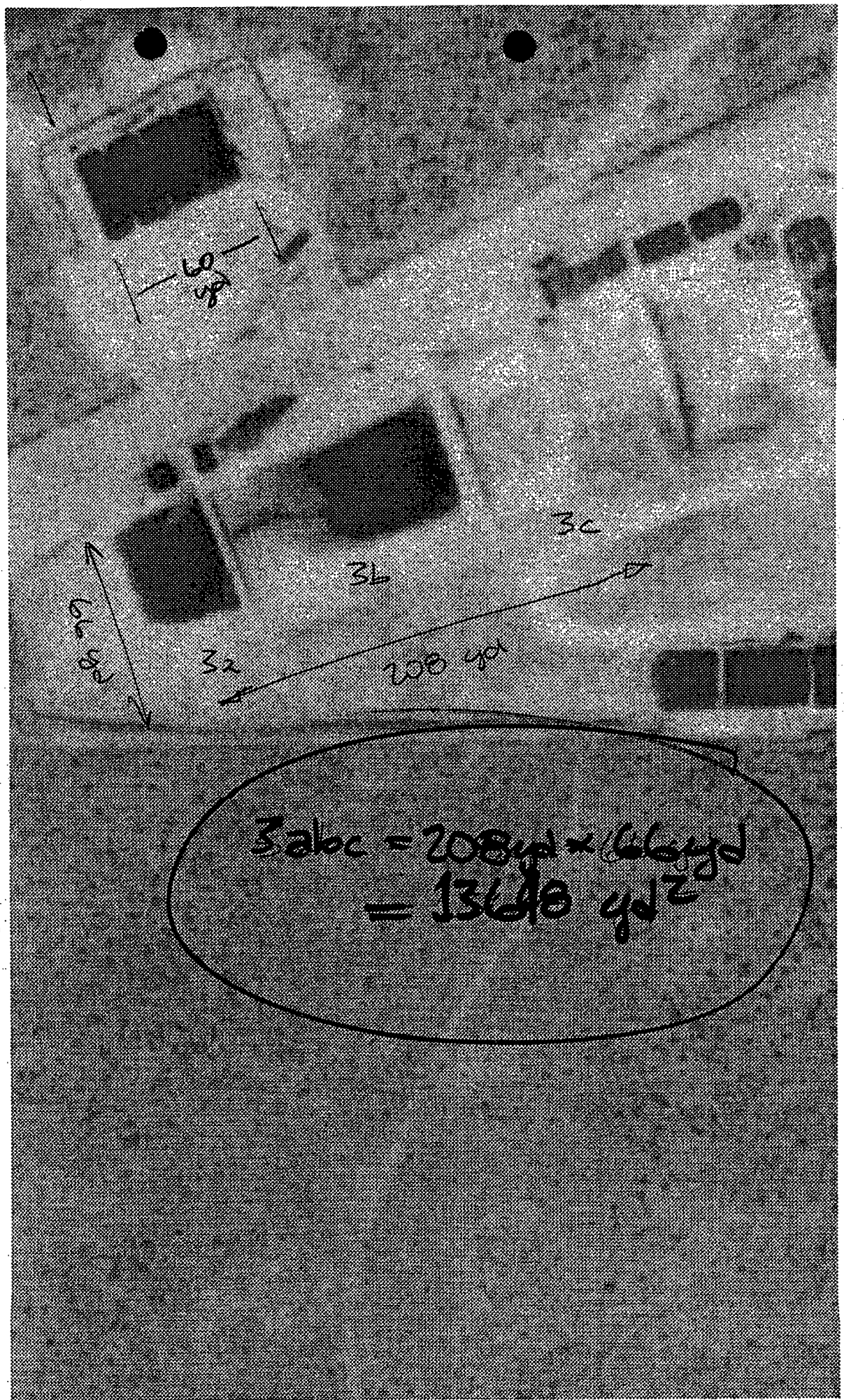
6000

6000

3600 g d 2

3d

$\frac{1}{4}$  4 ft deep  
 $\times 16 = 2800$   
 $\text{yd}^3$   
 $\frac{1}{4} ?$



3abc =

90 m x 60 m  
 208 yd x 66 yd  
 13648 yd<sup>2</sup>  
 F 1 ft deep  
 = 4549 yd<sup>3</sup>



Ken Marsan 1430 7/25/02

① Temp Bottom Pit 140' x 130' x 5' (lined) (net) (full)

② filters more severe!  
centrifuge sounds only saw  
17 ft, lifts, cap caliche  
red bed visible @ 15'-20' bss

1989 Jerry S - no GW  
800-1200' red bed permeable  
covers weekly, daily if  
wind blown  
2 zones uncovered

③ dry pits muds fract fluids  
7,8,9 water = R<sub>1</sub> dry - cuttings  
remove liquids, - 3 cells  
no oil no bio R<sub>1</sub>, evap  
landfill mix 90' x 325' x 5'  
82° 299°

④ crop ponds  
(3a-d) produced waters in 1/2 tanks  
skim swim prevents  
evap PES = black color  
see aerial photos for Simon PB

no H<sub>2</sub>S - too salty for bio

⑤ Temp Bottom Pit (liner)  
cell # = 3 115' x 150' x 4'  
fract bottoms, 2 1/2 R<sub>1</sub> d monet  
106 138 3 cells

⑥ wash put  
20-2 2351' x 50' x 6' 3 cells  
216 46 6 berm

⑦ 3 cells cuttings gaps  
230' x 260' x 4' 10-12  
82° 239°

⑧ cuttings 3 cells  
4.5' 70' x 270' x 4'  
64' 298° (E of O/W separator)

⑨ treatment plant  
clean tanks, R<sub>1</sub> bottoms  
feed land, bump oak, side  
in good shape

12K Ford  
57 ft (actual) = 62 ft (3913 = 615)  
(P<sub>2</sub> 600)

2/2 82° 1600 7/25

26 2-0

#  
1212

$$\frac{27}{25} = 0.92$$

BS &amp; W

R<sub>k</sub> on site, spreadingyd<sup>3</sup> calculated stock on hand 7/25/02  
(no accumulation since)vol in R<sub>k</sub> Plant =  $\frac{1}{2}$  tank vol

Put 3d cap

12" culch no clay

Landfill

2 acres = area open 7/25/02  
(common practice)no clay in cap - no GW to protect  
12" culch

Treat Plant

leave steel in place (no recycle)

Reves

not reg'd on fee land

Full Pits?

not reg'd, site secure

Culch spread on site

Security

resident @ ranch house

H<sub>2</sub>S

not a problem w/ BS &amp; W spread out

Sampling

not clearance but status

Solid Waste

5 trucks of liner scarp to on-site landfill  
\$10/yd<sup>3</sup> (load haul drop compact cover)

BS & W on hand  
(~ 50% water)

Treating Plant 516 yd<sup>3</sup>

Pit 13 1810 yd<sup>3</sup>

Pit 16 215 yd<sup>3</sup>

pump & haul to Pit 3 c 2540 yd<sup>3</sup> \$ 16,020  
spread & blend w/ mat'l from 3d \$ 4,660  
\$ 20,680

Clean Plant ..... \$2880

Ben Material

5450 yd<sup>3</sup>

(1, 2, 4-6, 7-9, 10-12, 13, 16)

bulldoze in 3d (1, 2, 4-6)

load & haul to 3d (7-9, 10-12, 16)

load & haul (13)

spread to 2 yd depth

cap w/ 12" culch

2200 yd<sup>3</sup> \$ 3520  
3200 yd<sup>3</sup> \$ 5280  
750 yd<sup>3</sup> \$ 1340  
\$ 8800  
1375 yd<sup>3</sup> \$ 5360

\$ 24,300

Landfill

2 acres w/ 12" culch  
up 4840 yd<sup>3</sup>  
haul  
spread

\$ 2,480  
\$ 8,000  
\$ 7,740  
\$ 18,220

Soil Samples 8 ea

Pits 3 a b c 3  
Pits 13, 16 2  
Pits 7-9 1  
Pits 10-12 1  
Field Dye 1

TPH 8015 \$600 ea

BTEX (incl report)  
(test pits)

\$4,800

Mob Demob (dozer & loader) .....

\$2360

Treat BS & W (bioRx full 300 yd<sup>3</sup> twice) ...

\$12,400

Solid Waste (5 trucks 12 yd<sup>3</sup> \$10/yd) ...

~~\$600~~  
\$ 2500

Reports Contingencies (15%) — ~~⊗~~ \$4,520

SWPPP \$1750 Gen'l Rx \$2640

9/12/02

OCD

$L_{yd} = 4.0 \text{ yd}$

$$\frac{yd^3}{yd^3} \frac{27A^2}{A^3} \frac{7.48 \text{ gal}}{A^3} \frac{5b1}{42 \text{ gal}}$$

# Unit Costs (MK - Task 6)

transport BS&W  $\frac{\$25000}{5500 \text{ bbl}} = \$4.55/\text{bbl}$   
 $(\$21.84/\text{yd}^3)$

scrape & push  $\frac{\$10206}{3958 \text{ yd}^3} = \$2.58/\text{yd}^3$

push 2, 4-6 into 3d  $\frac{\$3264}{1434 \text{ yd}^3} = \$2.28/\text{yd}^3$

Put 16 BS&W to 3d  $\frac{\$44,390}{1481 \text{ yd}^3} = \$29.97/\text{yd}^3$   
 $(\$6.24/\text{bbl})$

transport BS&W =  $\frac{\$32237}{1111 \text{ yd}^3} = \frac{\$29.02}{\text{yd}^3}$   
 (Task 3)  
 (MK) to

Move Mat'ls (Task 9)  $\frac{\$4468}{1721 \text{ yd}^3} = \$2.59/\text{yd}^3$   
 (7-9 10-12 to 3d)

C2p (Task 10)  $\frac{\$12488}{4685 \text{ yd}^3} = \$2.65/\text{yd}^3$   
 12" rock }  
 18" clay }  
 6" sand }  
 (3A) =  $(3000 \text{ yd}^2?)$   
 $\frac{\$655 \text{ yd}^2}{4685 \text{ yd}^3}$

C2p (Task 11)  $\frac{\$64200}{27000 \text{ yd}^3} = \$2.38/\text{yd}^3$   
 3ft C2p

2nd fill

$\text{area} = 27000 \text{ yd}^2 = 243000 \text{ ft}^2 = 5.6 \text{ acres}$



①

Full Doser Operator Pickup

\$ 95<sup>80</sup> hr

mob demob

Soft 10 yd<sup>3</sup>/10 min

②

2 trucks 5 loads/hr 120 yd<sup>3</sup>/hr

3 days  
2

truck 40 + 20<sup>20</sup> 60<sup>20</sup> x 2 x 30

(3600)

loader

opr  
pickup

\$ 77<sup>80</sup>  
hr x 30

(2334)

③ BS & W

20000 \$ 70/hr 120 bbls

nearest R bet Eu & Hobbs

1hr 1hr  
fill pumpoff

2 hrs en route  
round trip

disposed \$ 0.50/bbl produced water

\$ 375 - 375/bbl BS & W

③

one loader busy full time

5 min to load 12 yd<sup>3</sup>/truck

5 loads/hr 3 trucks → 1/2 mile

- since - → 1 mile

20 loads  
hr

12 loads/hr

④

12" circles

compacts  $\frac{1}{3}$  rd18" before  
compactionsend inside 20%  
expansion

①

dozer/ripper ~ push up

D6  $\frac{1500 \text{ cu}^3}{\text{day}}$ 

②

loader + trucks

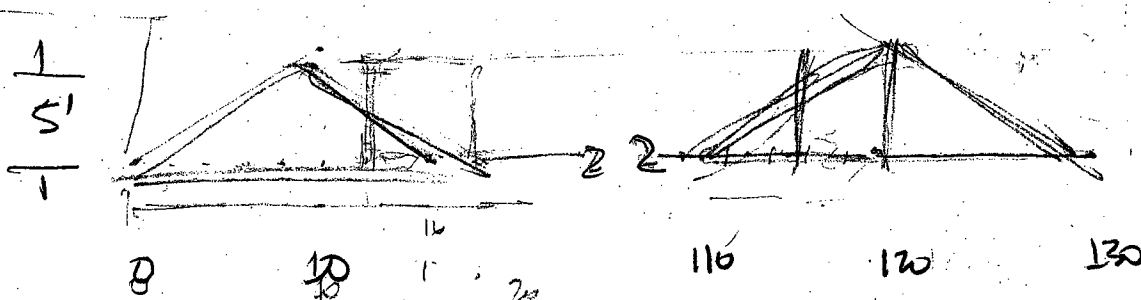
③

dozer spreads piles

## ① Temp Bottom Pit (2d) Trest Plant

paced  
width140  
129130  
1205  
5

freboard = 3'



$$116 - 12 = 104$$

$$\begin{aligned} \text{pit volume} &= 104 \times 94 \times 5 = 48880 \text{ ft}^3 \\ &= 48,900 \text{ ft}^3 \\ &= 1,810 \text{ yd}^3 \end{aligned}$$

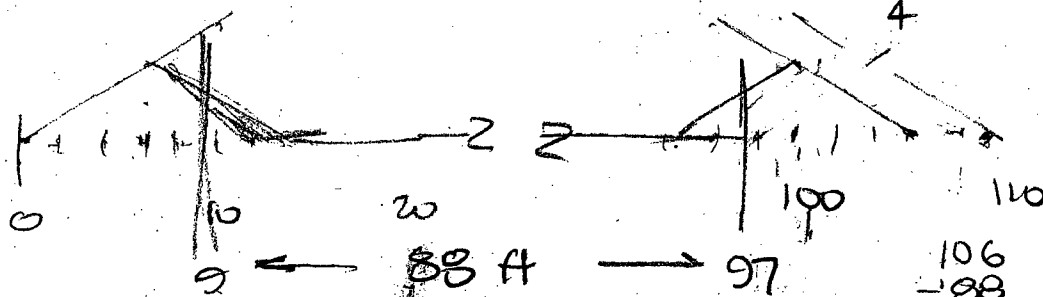
$$\begin{aligned} 126 \\ 130 - 104 &= 26 \\ 120 - 26 &= 94 \end{aligned}$$

$$\begin{aligned} \text{berm volume} &= L \times \Delta \\ &= 2(129 + 120) \times 40 = 19,900 \text{ ft}^3 \\ &= 737 \text{ yd}^3 \end{aligned}$$



$$\Delta = \frac{1}{2} b h = 16 \times 5 \times \frac{1}{2} = 40 \text{ ft}^2$$

## ② volume BS&amp;W in Pit 162



$$34.5 - 18 = 16.5 \text{ ft}$$

$$98 \text{ ft} \times 16.5 \text{ ft} \times 4 \text{ ft} = 5808 \text{ ft}^3 = 215 \text{ yd}^3$$

$$\begin{aligned} \Sigma \text{ BS \& W on site} &= 2025 \text{ yd}^3 \\ & (7/25/02) \end{aligned}$$

CRI \$

Move BS &amp; W

9/12/02

BS & W

$$2025 \text{ yd}^3 \frac{22 \text{ ft}^3}{\text{yd}^3} \frac{7.48 \text{ gal}}{\text{ft}^3} \frac{6 \text{ bl}}{42 \text{ gal}} = 9737 \text{ bl}$$

1) haul

$$12066 \text{ bl/truck} = 81 \text{ truck loads}$$

round trip CRI  $\Rightarrow$  Sundance

2 hrs transit  
1 hr load  
1 hr unload

4 hrs @ \$70/hr

\$280/truck

Disposal \$350/bl =

\$420

\$64,800

\$800 truck

\$32/yd<sup>3</sup>if 50% H<sub>2</sub>O ?

2)

on site

can be blended &amp; spread

use Pit 32 b c

Pump Truck from Pit 13 to 32 b c  
Pit 164 6<sup>32</sup>  
cy

81 truck loads

1 hr load  
1 hr unload  
0.25 hr transit

2.25 hrs \$70/hr =

$$81 \text{ loads} \left( \frac{2.25 \text{ hrs}}{\text{load}} \right) \frac{\$70}{\text{hr}} = \$12,800$$

use berm mat'l for blending

use dozer to spread

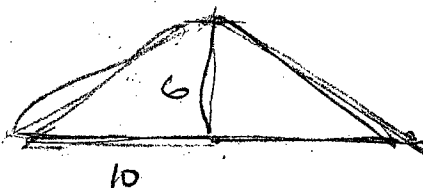
$$\Delta \text{ yd}^3 = 2025 \text{ yd}^3$$

$$\text{dozer } 2025 \text{ yd}^3 \frac{1 \text{ hr}}{60 \text{ yd}^3} \frac{\$95}{\text{hr}} = \$3240$$

some of spread  
\$ already  
incorporated  
in previous  
costs

Area (X.C.) of Berm

6:10 slope

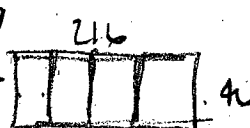


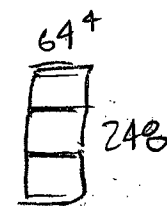
<u>h.</u>	<u>b</u>	<u><math>\frac{1}{2}hb (A^2)</math></u>	<u><math>\frac{1}{2}hb (yd^2)</math></u>
4	13.3	26.7	2.97
5	16.7	41.7	4.63
6	20.0	60.0	6.67

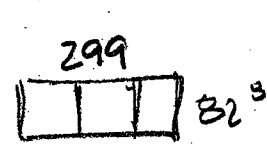
Volume of Kern Material

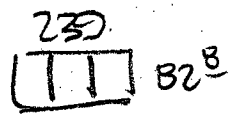
Distance to 3d  
(4x2) 3d

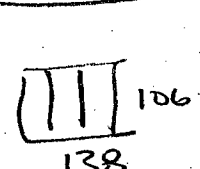
1a  $28 \times 28 \approx 37 \text{ yd}$   
1b  $25 \times 28 = 35 \text{ yd}$  } 72 yd  $214 \text{ yd}^3$  150 yd

2   
2a  $216 \times 2 + 46 \times 5$   
2b  $432 + 230$   
2c  $662 \text{ ft}$   
 $221 \text{ yd} \times 6.67 \text{ yd}^2$  }  $1470 \text{ yd}^3$  n.a.

4   
5  $248 \times 2 + 64 \times 4$   
6  $496 + 258$   
 $754 \text{ ft}$   
 $251 \text{ yd} \times 2.97 \text{ yd}^2$  }  $746 \text{ yd}^3$  n.a.

7   
8  $299 \times 2 + 82 \times 4$   
9  $598 + 331$   
 $929 \text{ ft}$   
 $310 \text{ yd} \times 4.63 \text{ yd}^2$  }  $1430 \text{ yd}^3$  100 yd

10   
11  $239 \times 2 + 82 \times 4$   
12  $478 + 331$   
 $809 \text{ ft}$   
 $270 \text{ yd} \times 2.97 \text{ yd}^2$  }  $801 \text{ yd}^3$  140 yd  
13  $737 \text{ yd}^3$  380 yd

16a   
16b  $138 \times 2 + 106 \times 4$   
16c  $276 + 424$   
 $700 \text{ ft}$   
 $267 \text{ yd} \times 2.97 \text{ yd}^2$  }  $793 \text{ yd}^3$  230 yd

17

$\Sigma \text{ yd}^3 \text{ to Pit 3C} = 5454 \text{ yd}^3$

Move berms into 3d

① 2200 yd<sup>3</sup> bulldozed 50 ft

$$2200 \text{ yd}^3 \left( \frac{1 \text{ hr}}{60 \text{ yd}^3} \right) \$ \frac{96}{\text{hr}} = \underline{\underline{\$ 3520}}$$

② 3200 yd<sup>3</sup> loaded & hauled 200 yds

$$\begin{array}{rcl} 1 & \text{front end loader} & \$78/\text{hr} \\ 2 & \text{trucks @ 60 ea} & \$120/\text{hr} \\ & & \hline & & \$198/\text{hr} \end{array}$$

5 loads/hr/truck

12 yd<sup>3</sup>/truck

$$\frac{\text{yd}^3}{\text{hr}} = \frac{5 \text{ loads}}{\text{truck hr}} \times 2 \text{ trucks} \times \frac{12 \text{ yd}^3}{\text{load}} = 120 \text{ yd}^3/\text{hr}$$

$$3200 \text{ yd}^3 \left( \frac{\text{hr}}{120 \text{ yd}^3} \right) \$ \frac{198}{\text{hr}} = \underline{\underline{\$ 5280}}$$

③ 750 yd<sup>3</sup> 1/2 mile

Plt 13

1 front end loader

3 trucks @ 4 loads/hr

load truck in 5 min  
= 12 loads/hr

$$\begin{array}{rcl} \$78/\text{hr} & & \$ \\ \$180/\text{hr} & & 258 \\ & & \hline & & \text{hr} \end{array}$$

$$\frac{\text{yd}^3}{\text{hr}} = 3 \text{ trucks} \times 4 \frac{\text{loads}}{\text{hr}} \times \frac{12 \text{ yd}^3}{\text{truck load}} = 144 \frac{\text{yd}^3}{\text{hr}}$$

$$750 \text{ yd}^3 \left( \frac{\text{hr}}{144 \text{ yd}^3} \right) \$ \frac{258}{\text{hr}} = \underline{\underline{\$ 1340}}$$

$$\Sigma = \$ 10,100$$

Spread & Cap Met'l in Pit 3d

<sup>6150</sup>  
Spread ~~5500~~ yd<sup>3</sup> (to 2 yd depth)

2200  
3200  
780  
6150

Dozer 60 yd<sup>3</sup>/hr @ \$95<sup>80</sup>/hr  
<sup>6150</sup>  
~~5500~~ yd<sup>3</sup>  $\frac{\text{hr}}{60 \text{ yd}^3} \times \frac{\$95^{\text{80}}}{\text{hr}} = \$\underline{\underline{9340}}$

Cap

haul 18" over <sup>3075</sup>~~2750~~ yd<sup>2</sup> = <sup>1537</sup>~~1375~~ yd<sup>3</sup>  
 (will compact to 12")

source landfill area ~  $\frac{3}{4}$  mile away

a) dozer rips ~~1375~~ yd<sup>3</sup>  $\frac{\text{day}}{1500 \text{ yd}^3} \times \frac{8 \text{ hrs}}{\text{day}}$   
 = 7.3 hrs  
 = \$700 782

b)  $\frac{1}{3}$  loader 78 } \$258/hr @ 144 yd<sup>3</sup>/hr  
       3 trucks 180 }  
<sup>2750</sup>  
~~1375~~ yd<sup>3</sup>  $\left( \frac{\text{hr}}{144 \text{ yd}^3} \right) \times \frac{\$258}{\text{hr}} = \$\underline{\underline{2460}}$

c) spread & compact w/ dozer

<sup>2460</sup>  
~~1375~~ yd<sup>3</sup>  $\frac{\text{hr}}{60 \text{ yd}^3} \times \frac{\$95^{\text{80}}}{\text{hr}} = \$\underline{\underline{2200}}$   
 $\Sigma = \$6000$   
 rev

780  
 2460  
 2200  
\$5360  
 $\frac{\$5360}{1375 \text{ yd}^3} \} \$390/\text{yd}^3$



Cap Lundru

2 acres need cover

13" cliche before compaction = 12" after

$$\begin{aligned} \text{cover needed} &= 2 \text{ acres} \frac{43560 \text{ ft}^2}{\text{acre}} \cdot 1.5 \text{ ft} \frac{\text{yd}^3}{27 \text{ ft}^3} \\ &= 4840 \text{ yd}^3 \end{aligned}$$

2) dozer rps cliche @ 1500 yd<sup>3</sup>/day

$$4840 \text{ yd}^3 \frac{1 \text{ day}}{1500 \text{ yd}^3} \frac{8 \text{ hrs}}{\text{day}} \frac{\$95^{\text{hr}}}{\text{hr}} = \underline{\underline{\$2480}}$$

b) haul cliche ~ 250 yds

$$\left. \begin{array}{l} 1 \text{ front end loader } \$78/\text{hr} \\ 2 \text{ trucks } \$120/\text{hr} \end{array} \right\} \$198/\text{hr}$$

$$4840 \text{ yd}^3 \frac{120 \text{ yd}^3/\text{hr}}{120 \text{ yd}^3} \frac{\$198}{\text{hr}} = \underline{\underline{\$8006}}$$

c) spread &amp; compact

$$\text{dozer } 4840 \text{ yd}^3 \left( \frac{\text{hr}}{60 \text{ yd}^3} \right) \frac{\$95^{\text{hr}}}{\text{hr}} = \underline{\underline{\$7740}}$$

$$\Sigma = \$18,200$$

Dozer / Low Boy

1 day

$$96 + 60 = \$156/hr$$

$$\underline{\underline{\$1250}}$$

Trucks na

Loader / Low Boy

1 day

$$78 + 60 = \$138/hr$$

$$\underline{\underline{\$1100}}$$

Clean Tanker

$$\text{gang} = 4 + \text{truck} \quad \$100/hr$$

(incl SUBA)

\$2800

+ 20% misc

3 days clean blzt pent

$$3 \text{ days } \left( \frac{8 \text{ hrs}}{\text{day}} \right) \$100/hr$$

\$2400

$$\begin{matrix} 6 \times 750 \\ 3 \times 150 \end{matrix} \left\{ \begin{matrix} 4500 \\ 450 \end{matrix} \right.$$

$$4950 \text{ bbl} = 1030 \text{ yd}^3$$

$$\text{if } 50\% \rightarrow 515 \text{ yd}^3 \text{ BS&W in Rk Tanks}$$

BS&amp;W low Rk in Pit 3ab

turn soil 2x/yr for 1 yr

add fertilizer \$150/yr

$$6200 \times 2 = \$12,400$$

mob demob dozer 1250

$$\text{turn} \sim 3000 \text{ yd}^3 \quad \frac{1 \text{ hr}}{60 \text{ yd}^3}$$

$$\frac{\$96}{\text{hr}} = \$4800$$

\$6050

$$\frac{3000 \text{ yd}^3}{12'' \text{ deep}} = 6000 \text{ yd}^2$$

$$= 6000 \text{ yd}^2 = 60 \times 100$$

n. l. 204.1

$$\text{Vol} = 275 \text{ yd} \times 70 \text{ yds} = 19250 \text{ yd}^2$$

3a-d      200      100

$$\underline{\underline{3d}} \approx 60 \text{ yd} \times 60 \text{ yds} = 3600 \text{ yd}^2$$

$$\text{add } 6150 + 1540 \text{ cy} = 7690 \text{ yd}^3$$

$$\Delta \text{height} = 2.13 \text{ yd}$$

$\Delta$  Gen'l work  
1 dozen day  
to work  
perimeter of  
Put 3

$$\underline{\underline{3ab}} \quad 120 \text{ yds} \times 50 \text{ yds} = 6000 \text{ yd}^2$$

$$\text{add BS \& W} \quad 3000 \text{ yd}^3$$

$$\Delta h = 0.5 \text{ yd}$$

Gen'l Work  
Contour  
Scrape  
Grade

DG 96  
truck 60  
loader 78

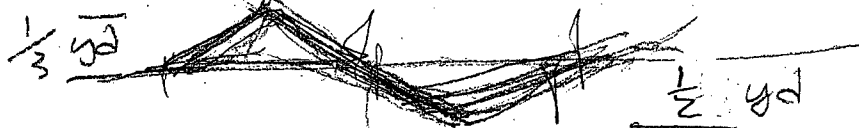
\$ 234/hr

Surface Water Runoff

Protect Pits, diversion ditch

300 yds

4 yds



8 hrs  
\$ 1370  
~~770~~  
2690



$$\Delta = \left(\frac{1}{2}\right) \frac{1}{2} (4) = 1 \text{ yd}^2$$

$$\text{Vol} = 300 \text{ yds} (1 \text{ yd}^2) = 300 \text{ yd}^3$$

$$\text{hr} \quad 300 \text{ yd}^3 \left( \frac{\text{hr}}{\text{yd}^3} \right) \frac{\$96}{1} \approx \$800$$

Erosion  
Control

RECEIVED

FEB 11 2002

Environmental Bureau  
Oil Conservation Division

CRI

CONTROLLED RECOVERY INC.

P.O. BOX 388 • HOBBS, NM 88241 • (505) 393-1079

February 6, 2002

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

RE: Legal notice February 2, 2002. Notice of application for oil and  
gas waste. Disposal well permit Samson Resources. (Copy Attached)

Please provide complete list and description of "other oil and gas waste"  
described in the above application, and will Rule 711 apply to this facility?

Sincerely,

  
Ken Marsh

LEGAL NOTICE

February 2, 2002

NOTICE OF APPLICATION  
FOR OIL AND GAS  
WASTE DISPOSAL  
WELL PERMIT

Samson Resources, Two  
West Second Street, Tulsa,  
Oklahoma 74103, Kevin Ol-  
son, District Engineer,  
phone number (918) 583-  
1791 is applying to the New  
Mexico Oil Conservation Di-  
vision for a permit to dis-  
pose of produced salt water  
or other oil and gas waste  
by well injection into a po-  
ros formation productive of  
oil or gas.

The applicant proposes  
to dispose of oil and gas  
waste into the Devonian for-  
mation, State BD Lease,  
Well Number 3. The pro-  
posed disposal well is locat-  
ed 1980' FSL and 660' FEL  
in Section 2, T12S, R33E, in  
the Bagley Field in Lea  
County, NM. The wastewa-  
ter will be injected into strata  
in the subsurface depth in-  
terval from 11,060 to 11,400  
feet. The proposed maxi-  
mum injection rate is 20,000  
barrels per day and the pro-  
posed maximum injection  
pressure is 1,790 psi.

Requests for a public  
hearing from persons who  
can show they are adversely  
affected or requests for fur-  
ther information concerning  
any aspect of the application  
should be submitted in writ-  
ing, within fifteen days of  
publication, to the Oil Con-  
servation Division, 1220  
South St. Francis Drive,  
Santa Fe, New Mexico  
87505.  
#18725

RECEIVED

FEB 05 2002

Environmental Bureau  
Oil Conservation Division

**CRI**  
**CONTROLLED RECOVERY INC.**

P.O. BOX 388 • HOBBS, NM 88241 • (505) 393-1079

January 28, 2002

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

Dear Martyne:

CRI received this from Conoco, Inc. Please review and advise CRI of any activity or suggestions.

Thanks,

*Carmella Van Maanen*  
Carmella Van Maanen



Joyce M. Miley  
Environmental Director  
Natural Gas & Gas Products

Conoco Inc  
Humber 3036  
P.O. Box 2197  
Houston, TX 77252-2197  
(281) 293-4498  
Fax: (281) 293-1214

January 25, 2002

**Certified Mail No.: 7000 1670 0005 2358 8367**  
**Return Receipt Requested**

Mr. Roger C. Anderson  
Chief, Environmental Bureau  
Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505

RE: Discharge Plan GW-175  
Raptor Gas Transmission LLC  
Hobbs Gas Plant  
Lea County, New Mexico

Discharge Plan GW-162  
Raptor Gas Transmission LLC  
Antelope Ridge Gas Plant  
Lea County, New Mexico

Dear Mr. Anderson:

Conoco alerted you via letter dated November 5, 2001 that it was investigating a potential violation of Discharge Plan Approval Condition #3 at the Hobbs Gas Plant. The potential violation was discovered during an internal audit. Since that time, Conoco has determined that a violation may have occurred when Conoco sent nonexempt waste from the Hobbs Gas Plant to the Class II disposal site in Hobbs operated by Control Recovery Inc (CRI) in August 2001. Conoco has further determined during additional audit activities that a similar potential violation occurred at the Antelope Ridge Gas Plant, Discharge Plan GW-162.

Hobbs Gas Plant: The Discharge Plan specifies that the facility may dispose of exempt and nonhazardous wastes at an OCD-approved Class II facility, such as CRI. However, Conoco sent 130 barrels of nonexempt waste to CRI for disposal in August 2001. The nonexempt waste was taken from a tank that contains used oil from maintenance activities, washwater and drips from process units, and rainwater. The contents of the tank were sampled in July 2001 and analyzed at Cardinal Laboratories in Hobbs, NM. Results indicated that the sample contained 8.59 mg/l benzene and the EPA hazardous waste limit for benzene is 0.5 mg/l.

Antelope Ridge: Conoco made two shipments of nonexempt waste to CRI on August 16 and September 17, 2001. The first shipment contained 120 barrels of mixed nonexempt waste and produced water; the second shipment was 120 barrels of nonexempt waste.

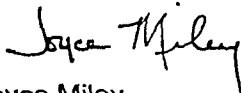
The nonexempt waste was taken from a tank that contains used oil from maintenance activities, washwater and drips from process units, and rainwater. The contents of the tank were sampled in July 2001. Sampling results completed by Cardinal Laboratories in Hobbs indicated that the waste sample contained 13.5 mg/l benzene.

Conoco will notify CRI about the shipments and the potential of a regulatory violation. However, the type of material sent to CRI was substantially similar to the wastes that CRI is permitted to accept and burn for energy recovery. For example, CRI is permitted to handle E&P exempt wastes. The benzene level in E&P exempt waste such as crude oil and wastes associated with crude are generally higher than the levels contained in the Conoco shipments. Any violations of the respective facility Discharge Plans therefore appear to be regulatory in nature, rather than violations that result in adverse environmental impacts. As such, Conoco seeks your concurrence that no further remedial action is warranted at this time.

Conoco is currently developing formal procedures to prevent recurrence of this type of event. In the interim, Conoco has implemented temporary procedures that prohibit non-exempt waste shipments from these sites without sample results and the concurrence of environmental personnel.

Conoco is also, through a similar letter, addressing this matter with David Cobrain in the NMED - Waste Bureau. If you would like to discuss these matters in more detail, please feel free to call me.

Sincerely,



Joyce Miley

cc: Ken Marsh - CRI (via Fax 505-393-3615)  
Paula Kochman - Conoco Legal  
Marshall Honeyman - Hobbs Office  
ENV File: 216-4-21



Joyce M. Miley  
Environmental Director  
Natural Gas & Gas Products

Conoco Inc  
Humber 3036  
P.O. Box 2197  
Houston, TX 77252-2197  
(281) 293-4498  
Fax: (281) 293-1214

January 25, 2002

**Certified Mail No.: 7000 1670 0005 2358 8350**  
**Return Receipt Requested**

Mr. David Cobrain  
New Mexico Environment Department  
Hazardous Waste Bureau  
P.O. Box 26110  
Santa Fe, New Mexico 87502

RE: Discharge Plan GW-175  
Raptor Gas Transmission LLC  
Hobbs Gas Plant  
Lea County, New Mexico

Discharge Plan GW-162  
Raptor Gas Transmission LLC  
Antelope Ridge Gas Plant  
Lea County, New Mexico

Dear Mr. Cobrain:

Conoco alerted you via letter dated November 5, 2001 that it was investigating a potential violation of Discharge Plan Approval Condition #3 at the Hobbs Gas Plant. The potential violation was discovered during an internal audit. Since that time, Conoco has determined that a violation may have occurred when Conoco sent nonexempt waste from the Hobbs Gas Plant to the Class II disposal site in Hobbs operated by Control Recovery Inc (CRI) in August 2001. Conoco has further determined during additional audit activities that a similar potential violation occurred at the Antelope Ridge Gas Plant, Discharge Plan GW-162.

Hobbs Gas Plant: The Discharge Plan specifies that the facility may dispose of exempt and nonhazardous wastes at an OCD-approved Class II facility, such as CRI. However, Conoco sent 130 barrels of nonexempt waste to CRI for disposal in August 2001. The nonexempt waste was taken from a tank that contains used oil from maintenance activities, washwater and drips from process units, and rainwater. The contents of the tank were sampled in July 2001 and analyzed at Cardinal Laboratories in Hobbs, NM. Results indicated that the sample contained 8.59 mg/l benzene and the EPA hazardous waste limit for benzene is 0.5 mg/l.

Antelope Ridge: Conoco made two shipments of nonexempt waste to CRI on August 16 and September 17, 2001. The first shipment contained 120 barrels of mixed nonexempt waste and produced water; the second shipment was 120 barrels of nonexempt waste.



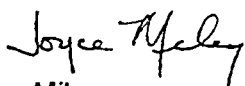
The nonexempt waste was taken from a tank that contains used oil from maintenance activities, washwater and drips from process units, and rainwater. The contents of the tank were sampled in July 2001. Sampling results completed by Cardinal Laboratories in Hobbs indicated that the waste sample contained 13.5 mg/l benzene.

Conoco will notify CRI about the shipments and the potential of a regulatory violation. However, the type of material sent to CRI was substantially similar to the wastes that CRI is permitted to accept and burn for energy recovery. For example, CRI is permitted to handle E&P exempt wastes. The benzene level in E&P exempt waste such as crude oil and wastes associated with crude are generally higher than the levels contained in the Conoco shipments. Any violations of the respective facility Discharge Plans therefore appear to be regulatory in nature, rather than violations that result in adverse environmental impacts. As such, Conoco seeks your concurrence that no further remedial action is warranted at this time.

Conoco is currently developing formal procedures to prevent recurrence of this type of event. In the interim, Conoco has implemented temporary procedures that prohibit non-exempt waste shipments from these sites without sample results and the concurrence of environmental personnel.

Conoco is also, through a similar letter, addressing this matter with Roger Anderson in the NMOCD. If you would like to discuss these matters in more detail, please feel free to call me.

Sincerely,



Joyce Miley

cc: Ken Marsh - CRI (via Fax 505-393-3615)  
Paula Kochman - Conoco Legal  
Marshall Honeyman - Hobbs Office  
ENV File: 216-4-21

Post-it® Fax No	7671	Date	12/7	# of pages	21
To	JENNIFER SHERIDAN	From	PAUL RITZMA		
Co./Dept.	EMNR	Co.	NMED		
Phone #		Phone #			
Fax #	827-1150	Fax #			

ENT



IN THE MATTER OF THE APPLICATION OF  
LEA LAND, INC. FOR THE MODIFICATION  
OF THE SOLID WASTE LANDFILL FACILITY  
PERMIT FOR THE LEA LAND NON-HAZARDOUS  
INDUSTRIAL SOLID WASTE LANDFILL

SW 00-08 (M)

HEARING OFFICER'S REPORT.  
PROPOSED FINDINGS OF FACT AND CONCLUSION OF LAW

DISCUSSION

Applicant Lea Land, Inc. ("Lea Land" or "Applicant") seeks modification of its solid waste permit for an existing landfill facility, the Lea Land Non-Hazardous Industrial Solid Waste Landfill ("landfill" or "facility") located in Carlsbad, Eddy County, New Mexico. The modification would allow the installation of a twenty-foot berm to increase final cap elevation and recover waste capacity compromised by the impossibility of excavating into caliche; the modification would also expressly allow certain non-hazardous, non-domestic, non-unique oil and gas wastes to be accepted at the facility. The New Mexico Environment Department (NMED) Solid Waste Bureau (Bureau) supports the modification of the permit, which was originally issued in February, 1996, with conditions necessary to protect public health and welfare and the environment.

This matter was heard on September 12, 2000, in Carlsbad, New Mexico. The Bureau was represented by Tannis Fox of NMED's Office of General Counsel, and the Bureau's position was presented by Don Beardsley. Bureau Chief Butch Tongate was also present. Those present on behalf of the Applicant included Dick Blenden, of the

Blenden Law Firm; Bob Hall, President of Lea Land; and Kenneth Slaughter, manager of the landfill facility. There was a third party in the action: Controlled Recovery, Inc. (CRI), a nearby oil field surface waste management facility operating pursuant to a permit issued by the Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department (OCD). Those present on behalf of CRI included Hunter Burkhalter and Susan Zulkowski of the Kemp, Smith Law firm in Austin Texas; Ken Marsh, President of CRI; and Mark Turnbough, CRI's consultant. Jerry Kamieniecki of the engineering firm Weaver, Boos and Gordon was present, but not representing anyone. No other member of the public was present; only the parties participated in questioning and testimony at the hearing.

The administrative record includes, *inter alia*, the application for permit modification, with extensive attachments, the notice of completeness determination, the notice of docketing, the hearing officer assignment, the notices of intent to present technical testimony, the transcript, extensive exhibits, several motions and responses, the post-hearing submittals from all parties, and this Report.

The hearing was conducted in accordance with 20 NMAC 1.4, and lasted approximately 6 and ½ hours. All parties had submitted notices of intent to present technical testimony. On the basis of a motion to exclude certain evidence filed by the Bureau, and argued at length among the parties at the beginning of the hearing, I did order certain limitations on the testimony that would be accepted during the hearing. The testimony, planned by CRI, would have gone to establish "legislative history" for the Solid Waste Act. The testimony would also have detailed the economic hardships

suffered by CRI as a result of Lea Land's purported "illegal competition," by virtue of its acceptance of oil and gas waste which might have otherwise gone to CRI.

Following is a brief summary of the testimony that was given:

On behalf of the Applicant, Mr. Slaughter testified concerning the operation of the facility, the facility's compliance with instructions from the Bureau; and the facility's agreement with the director of OCD, Roger Anderson, such that, for oil field waste generated in New Mexico, before the generator can dispose of the waste at Lea Land, the generator must obtain approval from Mr. Anderson. Mr. Slaughter also testified that Mr. Anderson had toured the facility, had indicated that the facility appeared sufficient to meet OCD's permitting requirements, and that Lea Land had applied for an OCD permit. He provided testimony concerning the construction of the berm, and discussed the limitation on taking only non-hazardous wastes at the landfill. On cross-examination by Mr. Burkhalter, he testified concerning the wastes associated with the production of oil and gas that had been accepted at the landfill, and the contracts with oil and gas production companies under which the wastes had been accepted.

On behalf of the Bureau, Mr. Beardsley, a Water Resource Engineering Specialist and currently acting Program Manager of the Bureau's Permitting Section, testified concerning his review of the application for permit modification. He testified that certain wastes not unique to the oil and gas industry are "industrial wastes." Mr. Beardsley testified that no other landfill had a permit condition like Lea Land's Condition No. 8, prohibiting the acceptance of waste regulated by OCD, and that at least three other major solid waste landfills in New Mexico are accepting or will accept at least certain portions

of the waste stream associated with the production of oil and gas. He also testified that he what he had intended to preclude at Lea Land with the existing Condition No. 8 was not the sort of non-unique oil and gas waste under discussion in this hearing, but a variety of sludges. Mr. Beardsley also testified to a letter of clarification that had been issued, on-going discussions concerning a detailed list of oil and gas wastes that might be accepted at a solid waste landfill, Lea Land's compliance with the manifest requirements imposed by the Bureau, and the disposal management plan (DMP) requirement with which the Bureau was proposing to replace existing Condition No. 8. Mr. Beardsley also testified that there would be "no further impact to the environment by the removal of Condition 8." On cross-examination, Mr. Beardsley stated that the fact that something is not a solid waste does not preclude its disposal at a solid waste landfill, and he gave the examples of sand and gravel, which are not solid wastes but are used for daily cover at landfills. He conceded that no express authority existed in the Solid Waste Act for either the acceptance of a non-solid waste at a solid waste landfill, or for the creation of a "unique/non-unique" distinction between certain oil and gas wastes. Finally, Mr. Beardsley conceded that, although the Bureau's position at hearing was that non-unique oil and gas wastes are industrial solid wastes, the regulatory definition of "industrial solid waste" excludes mining waste and oil and gas waste.

Mr. Turnbough testified as an environmental consultant with extensive solid waste experience that in his opinion "solid waste" as defined in New Mexico law and regulation does not include waste associated with the production of oil and gas. He stated he was concerned that the interpretation of acceptable wastes at a solid waste

landfill could change with the personnel at the Bureau, and he does not want his clients to be put in the position of having to dig up waste that had been approved previously for disposal.

Mr. Marsh testified that his facility, CRI, has been permitted since 1990 for oil and gas wastes, that there are certain wastes CRI does not accept, such as domestic wastes, which would be directed to a facility such as Lea Land, and that there are certain manifest requirements the generators must meet. He also testified that his motivation for contesting the permit modification was to assure compliance with the original permit and the law.

Every participant was allowed full opportunity to call witnesses, present testimony and other evidence, and cross-examine witnesses called by any other participant. The hearing was recorded and transcribed.

#### RECOMMENDATION

Based on the record, I recommend that the permit modification be issued as requested for the installation of the berm; that the existing Permit Condition No. 8 be deleted; that the request to insert a new permit condition expressly allowing the disposal of waste regulated by OCD be denied; and that the Bureau be directed to resolve the issues raised in this matter in a manner consistent with its statutory authority.

There was no challenge to the installation of the berm, and this portion of the permit modification will not be further discussed.

The hearing was almost entirely focused on the proposed deletion of Condition No. 8, and its replacement with a permit provision expressly allowing the disposal at Lea

Land of certain OCD-regulated waste, following the submission of a disposal management plan.

Essentially, this matter turns on an interpretation of the law, and not on any factual or scientific dispute. No evidence was presented that the acceptance of "non-unique" oil and gas waste at a solid waste landfill represents an environmental threat. As Mr. Beardsley stated, the same type of filters come from oil and gas production facilities as from blue jeans factories—this is what is meant by "non-unique." The Bureau has no plans to allow all oil and gas wastes, or any hazardous oil and gas wastes, to be disposed at solid waste landfills. The Bureau's position on this matter did not appear designed to work to anyone's detriment, but seemed to be a pragmatic and well-intentioned attempt to provide for the disposal of OCD-regulated waste identical to "solid waste" as that term is legally defined, at a time when OCD-permitted facilities, for whatever reason, are not widely available in the state. It was also clear from the hearing testimony and the exhibits that Lea Land is "unique" among permittees in that it is the only solid waste landfill in New Mexico expressly precluded by permit condition from accepting oil and gas wastes, and that there is no rational basis for this status. Having said that, I believe the Bureau has stepped outside of its statutory authority, and although it does not appear that any remedial action need be undertaken, I suggest that the Bureau be directed to bring its permitting actions more into line with a literal reading of the Solid Waste Act and its implementing regulations vis-à-vis wastes associated with the production of oil and gas. I did not find CRI's contention that Lea Land should be denied a permit on the basis of the "bad actor" language in the Act to be well-founded.

## ANALYSIS

### Statutory Construction

The New Mexico Solid Waste Act (Act), NMSA 1978, Sections 74-9-1 et seq., was adopted in 1990 with several purposes, among them, to "plan for and regulate, in the most economically feasible, cost-effective and environmentally safe manner, the reduction, storage, collection, transportation, separation, processing, recycling and disposal of solid waste." NMSA 1978, Section 74-9-2. The Act defines "solid waste," and in that definition, states that "solid waste does not include...drilling fluids, produced waters and other non-domestic wastes associated with the exploration, development or production, transportation, storage, treatment or refinement of crude oil, natural gas, carbon dioxide gas or geothermal energy." NMSA 1978, Section 74-9-3.N.

A year earlier, the New Mexico Legislature had amended the Oil and Gas Act, NMSA 1978, Sections 70-2-1, et seq, originally adopted in 1978. The Oil and Gas Act includes an enumeration of powers given to the Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department (OCD); the 1989 amendment had expanded the enumeration to include the powers "(21) to regulate the disposition of nondomestic wastes [sic] resulting from the exploration, development, production or storage of crude oil or natural gas to protect public health and the environment; and (22) to regulate the disposition of nondomestic [sic] wastes resulting from the oil field service industry, the transportation of crude oil or natural gas, the treatment of natural gas or the refinement of crude oil to protect public health and the environment including administering the Water Quality Act...."



Stated simply, and read together, these statutes provide that the regulation of non-domestic wastes associated with the production of oil and gas lies with OCD, not the NMED Solid Waste Bureau. The parties are in agreement that "domestic wastes" in the context of both statutes refers to waste ordinarily generated by a household, such as soda cans and sandwich wrappers. The parties were further agreed that domestic wastes associated with oil and gas production are regulated by the Bureau and are acceptable at a solid waste landfill.

Beyond domestic wastes, the Bureau's position is that non-hazardous waste "not uniquely associated" with the production of oil and gas is also regulated by the Bureau, and may be disposed of in a solid waste landfill. The Bureau, first citing Morningstar Water Users Ass'n v. N.M. Public Utility Comm'n, 120 N.M. 579, 904 P.2d 28 (1995), urges deference to its interpretation insofar as it implicates the agency's special expertise or a fundamental policy within the scope of the agency's statutory function. This begs the question of whether non-domestic, non-hazardous, non-unique oil and gas wastes are within the scope of the agency's statutory function, which is the question raised here. As the Court states in Morningstar, where the matter before a reviewing court is a question of fact, the court will generally defer to the decision of the agency. Morningstar at 120 N.M. 583, citing Attorney Gen. V. New Mexico Pub. Serv. Comm'n, 111 N.M. 636, 808 P. 2d 606 (1991). But the question of "whether an administrative agency has jurisdiction over the parties or subject matter in a given case is a question of law," and "New Mexico courts will accord 'little deference' to the agency's own interpretation of its jurisdiction." Morningstar at 120 N.M. 583, citing El Vadito de los Cerrillos Water Ass'n v. New

12/07/2000 THE 18.15 FAX 1 505 3212000 ENVIRONMENT DEPT. 0009

Mexico Pub. Serv. Comm'n, 115 N.M. 784, 858 P.2d 1263 (1993).

First, the text of a statute is the primary, essential source of its meaning. The Solid Waste Act is not ambiguous on a literal reading, particularly when read together with the Oil and Gas Act, and without ambiguity, there is no need to go further to attempt an interpretation. At no time did the Bureau contend that the statute, as written, is ambiguous. The Bureau's interpretation actually raises ambiguities rather than resolving them, particularly about what is meant precisely by "non-unique." When the words used in a statute are free from ambiguity and doubt, and express plainly the sense of the legislature, no other means of interpretation should be resorted to. City of Roswell v. New Mexico Water Quality Control Comm'n, 84 N.M. 561, 505 P.2d 1237 (Ct.App. 1972), cert. denied, 84 N.M. 560, 505 P.2d 1236 (1973). See also State ex rel. Helman v. Gallegos, 117 N.M. 346, 871 P.2d 1352 (1994)(If the meaning of a statute is truly clear it is of course the responsibility of the judiciary to apply the statute as written and not to second-guess the legislature's selection from among competing policies or adoption of one of perhaps several ways of effectuating a particular legislative objective.)

Second, even assuming that the statute would benefit from some interpretation, the Bureau's interpretation of its jurisdiction in this matter fails a number of standard statutory construction tests:

- (1) Words [such as "non-unique" or "uniquely"] are not to be added to a statute unless it is necessary to add them to prevent absurdity, injustice or contradiction. State v. Nance, 77 N.M. 39, 419 P.2d 242 (1966), cert. denied, 386 U.S. 1039 (1967); State ex rel. Barela v. New Mexico

12/07/2000 THU 10:19 FAX 1 505 327-2555 ENVIRONMENT DEPT. 4010

State Bd. Of Educ., 80 N.M. 220, 453 P.2d 583 (1969). Again, no such claim was made by the Bureau or the Applicant. Moreover, while the application of *ejusdem generis* is not entirely apt, it is notable that the legislature did include one qualifier for oil and gas wastes excluded from solid waste ("non-domestic"), indicating they intentionally did not include any other qualifiers, such as "non-unique" or "non-hazardous." See Cardinal Fence Co. v. Commissioner of Bureau of Revenue, 84 N.M. 314, 502 P.2d 1004 (Ct.App. 1972)(*ejusdem generis* applies the presumption in statutory construction that having gone to the trouble of enumerating a particular list, the legislature must have had in mind no other kind).

- (2) Two statutes covering the same subject matter should be harmonized, and if they are not irreconcilable, both shall be given effect. State v. Rue, 72 N.M. 212, 382 P.2d 697 (1963); Waltom v. City of Portales, 42 N.M. 433, 81 P.2d 58 (1938). There is a presumption that the legislature knew of the existing law, the Oil and Gas Act, as amended in 1989, when it adopted the Solid Waste Act a year later. The legislature's attempt to avoid overlapping jurisdiction for wastes associated with the production of oil and gas is clear on the face of the statutes, and should be honored by the respective agencies. Again, the Bureau did not claim, as it cannot, that the two acts are irreconcilable or contradictory.

- (3) Words are given their ordinary meaning unless a different intent is clearly indicated. Davis v. Commissioner of Revenue 83 N.M. 152, 489 P.2d 660 (Ct.App.), cert. denied, 83 N.M. 151, 489 P.2d 659 (1971). Without the insertion of the words "non-unique" or "non-hazardous" the parties were in agreement that the wastes in question were in fact associated with the production of gas and oil.
- (4) Although long-standing interpretations by an agency of a doubtful statute are persuasive and will not be lightly overturned by the courts, the Bureau did not establish that its interpretation was long-standing, or that it had been published or formalized, either by regulation or in any executed agreement with OCD (a rough "draft agreement" between NMED and OCD was included among the exhibits; at this point it seems to be merely a list). The Bureau's position that these non-unique wastes are "industrial solid wastes" contradicts the Bureau's own regulations, both directly and indirectly: Before a waste can be "industrial solid waste," it must first be "solid waste." And the regulatory definition of "industrial solid waste" specifically excludes "oil and gas waste," without any qualifiers [see 20 NMAC 9.1.105(AK)].
- (5) The Bureau's attempt to liken its insertion of the word "uniquely" with the insertion of that same word by the Environmental Protection Agency under Subtitle C is highly problematic, for many of the

reasons CRI discusses in its post-hearing closing argument submittal of October 30, and is not persuasive. I did not agree with CRI's contention that the agency's actions in the Joab matter in 1993 were relevant or enlightening; Joab had accepted drill cuttings and liquids, wastes associated with the production of oil and gas which are *not* "non-unique and non-hazardous," and the Bureau's position between the two cases is not contradictory. There was apparently no reason to draw the "unique/non-unique" distinction in Joab.

#### The "Bad-Actor" Basis for Denying a Permit Application

The evidence in the record shows that, over the past few years, Lea Land has been accepting certain non-unique, non-hazardous, non-domestic wastes associated with the production of oil and gas, with the Bureau's approval, and that when that approval was withdrawn temporarily, Lea Land honored that position as well. CRI contends that Lea Land's acceptance of any non-domestic wastes associated with the production of oil and gas should be considered a willful disregard for the environmental laws of this state, and that that disregard should serve as the basis for denying the application for permit modification under the "bad actor" portion of the Solid Waste Act, NMSA 19798, Section 74-9-24.B(5): A permit application may be denied if the Department has reasonable cause to believe that any person listed on the application has, among other things, exhibited a willful disregard for environmental laws of any state or the United States.

I believe CRI is out of line with this contention; it was undisputed that Lea Land

has never faced an enforcement action, or even been served with a notice of violation for any operations out of compliance with the laws or regulations as they are interpreted, implemented and enforced by the Bureau. The regulated community is entitled to reasonably rely upon the Bureau for specific direction in its operations and the construction of applicable regulations. Not only is it inappropriate to characterize Lea Land's conduct during the course of its existing permit as exhibiting "willful disregard," I suspect the Department would be estopped from suggesting anything of the sort, or from acting on an application on that basis. Although the hearing's only factual dispute related to some statements that may or may not have been made in meetings between NMED staff and CRI and its consultant, it appears that the Bureau's position was known to management, presumably increasing Lea Land's comfort level. The suggestion that Lea Land has been a "bad actor" is entirely unfounded.

#### The Acceptance of Oil and Gas Waste By Other Solid Waste Landfills

The record contains significant evidence concerning the acceptance of non-unique, non-hazardous, non-domestic oil and gas wastes by other solid waste landfills in New Mexico. The Bureau presented this evidence, apparently, to be clear about the fact that Lea Land was a "class of one" without reason or rationale, and to bolster its argument that its interpretation of the Act should be given deference. I did consider the evidence concerning the other landfills, and came to two conclusions: (1) Lea Land's permit should be modified to delete Condition No. 8, insofar as Lea Land is being treated differently from other solid waste landfills across the state without a rational basis; see Village of Willowbrook v. Olech 120 S. Ct. 1074 (2000); and (2)

Ultimately, the clarity of the language in the applicable statutes overcomes the pragmatic considerations or existing realities related to the disposal of oil field wastes, and the Bureau should be directed to address the disposal of oil field wastes at all solid waste landfills, not just Lea Land, in a manner consistent with the statutes. This may mean pursuing a legislative amendment; this may mean facilitating a dual permitting program between the agencies—a number of options come to mind. Until one of these options is executed, however, the Bureau's attempt to provide for the regulation of waste expressly excluded from its jurisdiction should cease, and no new permit provision relating to the disposal of OCD-regulated waste should be included in a solid waste permit.

### PROPOSED FINDINGS AND CONCLUSIONS

#### Procedural history

1. The New Mexico Environment Department (NMED) issued a solid waste landfill facility permit to Lea Land, Inc. ("Lea Land") on February 27, 1996.
2. The Permit contains Condition No. 8, which provides that "No petroleum waste or other substance regulated by the New Mexico Oil Conservation Division shall be disposed of in the proposed landfill."
3. On July 18, 2000, Lea Land applied to modify the Permit to install a twenty-foot berm and to remove Condition No. 8 from the Permit.
4. A hearing on the application was properly noticed and was held on September 12, 2000 in Carlsbad, New Mexico before a hearing officer properly appointed.  
Installation of a Twenty-Foot Berm
5. Lea Land proposes to modify its existing Permit by installing a twenty-foot berm

and thereby increasing the final cap elevation.

6. The Lea Land landfill site is underlain by a dense calcrete (caliche) bed, which prevents the current disposal cell from being excavated to the permitted design depth.
7. The inability to excavate has resulted in a loss of waste disposal volume.
8. Installation of a twenty-foot berm will increase the final cap elevation and will restore the permitted waste volume.
9. The berm is designed to have a four-to-one exterior slope and a three-to-one interior slope. These dimensions meet NMED requirements.
10. The interior side slope of the berm will be composite-lined.
11. The side slopes will incorporate a sufficient number of armored down-chutes to control erosion.
12. The installation of the berm will be protective of the environment.

#### Removal of Condition No. 8

13. Lea Land requests removal of Condition No. 8, which prohibits the disposal into the landfill of substances regulated by the Oil Conservation Division of the New Mexico Department of Energy, Natural Resources and Minerals (OCD).
14. No other landfill in the State of New Mexico has a permit condition such as Condition No. 8 imposed upon it.
15. At least three other major landfills in the state accept or will accept non-unique oil and gas waste, the San Juan Regional Landfill, the Lea County Regional Landfill and the Camino Real Landfill.



16. These landfills have accepted or will accept non-unique oil and gas wastes (so long as they are non-hazardous) that include but are not limited to: gas condensate filter, glycol filter, grease buckets, iron sponge, junked pumps and valves, metal plates, metal cables, molecular sieves, pip dope, pipe scale and other deposits removed from piping and equipment, plastic pit liners, produced water filters, sacks of unused drilling mud, sandblasting sand, soiled rags and gloves, support balls, activated aluminum, activated carbon, amine filters, barrels, drums, catalysts, contaminated concrete, construction debris, cooling tower filters, dehydration filter media, demolition debris, detergent buckets, dry chemicals, ferrous sulfate, elemental sulfur, fiberglass tanks, and gas plant tower packing materials.
17. OCD does not object to deletion of Condition No. 8 from the Permit.
18. There are two landfills in the state that are permitted by OCD to accept oil and gas waste, CRI in Hobbs and the Sundance facility near Eunice, south of Hobbs.
19. Lea Land has applied for a permit from OCD which would allow it to accept oil and gas waste under the Oil and Gas Act.
20. The Bureau proposes the following condition be placed in the Permit in lieu of the existing Condition No. 8:

Prior to acceptance by Lea Land Landfill of any waste regulated by the Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department, Lea Land Landfill shall submit to MED a Disposal Management Plan ("DMP") in accordance with 20 NMAC

9.1.711 and shall receive approval of the DMP by NMED. This condition does not apply to the following waste: office trash, paper, paper bags, soiled rags and gloves, construction debris, detergent buckets, fiberglass tanks, brush and other vegetation from clearing land, and sacks of unused drilling mud.

21. A DMP describes the nature of the handling and disposal techniques that are used for a specified waste.
22. As NMED characterizes it, non-unique oil and gas waste is industrial waste. For example, the same air filters can come from a blue jean factory as from oil and gas activities.
23. The acceptance of non-hazardous, non-unique, non-domestic oil and gas wastes at a landfill would not represent a threat to the environment, but is not consistent with a plain reading of the Solid Waste Act and the Oil and Gas Act.
24. NMED has jurisdiction to entertain Lea Land's application to modify its Permit.
25. Lea Land has not shown a disregard for the environmental laws of this state or the United States in its operation of the landfill under the existing permit.
26. Lea Land's request to install a twenty-foot berm complies with all of NMED's requirements, and should be granted.
27. Lea Land's request to delete Condition No. 8 from its permit will make its permit consistent with other solid waste permits across the state, and should be granted.
28. The Bureau's request for a permit provision expressly allowing the disposal of OCD-regulated wastes at the landfill, following the submission of a disposal

management plan, is not consistent with the Department's legal permitting authority, and should be denied.

RECOMMENDED FINAL ORDER.

A draft Final Order consistent with the recommendation above is attached and incorporated by reference.

The Hearing Officer appreciates the verbal one-day extension granted December 6 by the Director for the submission of her Report.

Respectfully submitted,



Original signed by:

FELICIA L. ORTH  
Hearing Officer

STATE OF NEW MEXICO  
BEFORE THE SECRETARY OF ENVIRONMENT

IN THE MATTER OF THE APPLICATION OF  
LEA LAND, INC. FOR THE MODIFICATION  
OF THE SOLID WASTE LANDFILL FACILITY  
PERMIT FOR THE LEA LAND NON-HAZARDOUS  
INDUSTRIAL SOLID WASTE LANDFILL

SW 00-08 (M)

FINAL ORDER

This matter comes before the Secretary of Environment (Secretary), following a hearing before the Hearing Officer on September 12, 2000, in Carlsbad, New Mexico. The Secretary properly delegated his decision-making in this matter to me.

The Applicant, Lea Land, Inc. seeks modification of its solid waste permit for an existing landfill facility, the Lea Land Non-Hazardous Industrial Solid Waste Landfill located in Carlsbad, Eddy County, New Mexico. The modification would allow the installation of a twenty-foot berm to increase final cap elevation and recover waste capacity compromised by the impossibility of excavating into caliche; the modification would also delete a prohibition relating to the acceptance of oil and gas waste contained in Condition No. 8 and expressly allow certain non-hazardous, non-domestic, non-unique oil and gas wastes to be accepted at the facility following the submission of a disposal management plan. The New Mexico Environment Department Solid Waste Bureau supports the modification of the permit, which was originally issued in February, 1996, with conditions necessary to protect public health and welfare and the environment.

Having considered the hearing record, including the parties' Closing Arguments,

Proposed Findings of Fact and Conclusions of Law, and the Hearing Officer's Report;  
and being otherwise fully advised regarding this matter;

I HEREBY ADOPT THE PROPOSED FINDINGS OF FACT AND  
CONCLUSIONS OF LAW SET OUT IN THE HEARING OFFICER'S REPORT.

IT IS THEREFORE ORDERED:

The permit modification requested is issued in part, and denied in part, effective upon the  
execution of this Order, as follows:

1. The permit modification is issued as proposed for the installation of the berm.
2. The existing Permit Condition No. 8 is deleted.
3. The proposal to insert a new permit condition in lieu of Condition No. 8  
expressly allowing the disposal of waste regulated by the Oil Conservation  
Division of the New Mexico Energy, Minerals and Natural Resources  
Department is denied.

---

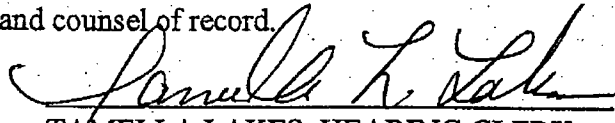
GREG LEWIS, DIRECTOR  
Water and Waste Management Division

NOTICE OF PROCEDURE FOR APPELLATE REVIEW

Any aggrieved party may seek appellate review in the Court of Appeals, pursuant to NMSA 1978, Section 74-9-30.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Final Order was mailed on 8, 2000, via first-class mail, to each of the parties and counsel of record.

  
TAMELLA LAKES, HEARING CLERK

CAMPBELL, CARR, BERGE  
& SHERIDAN, P.A.  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN  
MICHAEL H. FELDEWERT  
TANYA M. TRUJILLO  
ROBERT J. SUTPHIN, JR.

JACK M. CAMPBELL  
1916-1999

OIL CONSERVATION DIV.  
00 NOV 22 AM 3:22  
JEFFERSON PLACE

SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
FACSIMILE: (505) 983-6043  
E-MAIL: law@westofpecos.com

November 22, 2000

HAND-DELIVERED

Ms. Marilyn S. Hebert, Esq.  
New Mexico Department of Energy, Minerals and Natural Resources  
Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505

Re: Controlled Recovery, Inc.

Dear Ms. Hebert:

On August 8<sup>th</sup> Mr. Marsh and I met with Roger Anderson, Martyne Kieling and yourself to discuss the July 3<sup>rd</sup> letter from Ms. Wrotenbery that attempted to "re-permit" CRI's facility and impose additional operating and bonding requirements. At that meeting CRI pointed out that re-permitting was inappropriate under Rule 711 and that the additional operating and bonding requirements in the July 3<sup>rd</sup> letter were unnecessary and arbitrary. At the close of the meeting, CRI agreed to submit a draft closure plan for further discussion on the bonding requirement and your office agreed to reconsider the operating conditions set forth in Ms. Wrotenbery's letter.

On September 15<sup>th</sup>, CRI provided you with a draft closure plan and supporting letters. Shortly thereafter we had a brief conversation in which you expressed a desire to discuss these matters further. I have not heard from you since.

Since our last conservation, the OCD has issued two letters which are inconsistent with the amicable dialogue that began in August.

By letter dated September 27<sup>th</sup>, Chris Williams (District 1 Supervisor) attempted to "revoke" the netting exemptions for CRI's facility and demanded that CRI net all pits and ponds within 90 days or apply for individual netting exemptions. There is no factual or statutory basis for this action. CRI has exemptions from the previous district supervisor that cover all open pits and ponds at the facility. The same operating conditions exist today that existed at the time these exemptions were granted. During CRI's ten years of operation, there has

Ms. Marilyn S. Hebert  
November 22, 2000  
Page 2

only been one dead bird (a meadowlark) found in the facility. CRI justifiably relied on these exemptions in conducting and planning its business, and the Department cannot arbitrarily revoke them without demonstrating a material change in circumstances and good cause.

By letter dated November 7, 2000, Roger Anderson (Environmental Bureau Chief) asserted that the H<sub>2</sub>S plan submitted by CRI in August of 1997 is insufficient and demanded a new plan by December 7, 2000. Each of Mr. Anderson's questions about CRI's existing plan are addressed in the attachment hereto, and demonstrate the absence of any factual basis for Mr. Anderson's demand. CRI has had an H<sub>2</sub>S plan on file with the OCD for over three years and has operated its facility for ten years without a single H<sub>2</sub>S incident. There is no factual or statutory basis for Mr. Anderson's request that CRI file a "new" H<sub>2</sub>S plan by December 7th.

CRI remains willing to continue the dialog which began in August at your convenience.

Sincerely,

A handwritten signature in dark ink, appearing to read "Michael H. Feldewert" followed by a stylized flourish or initial.

Michael H. Feldewert

MHF/ras  
Attachment

cc w/ att:     Roger C. Anderson, Environmental Bureau Chief (via hand-delivery)  
                 Chris Williams, District 1 Supervisor (via mail)  
                 Ken Marsh (via mail)



**Attachment to November 22, 2000 Letter to Lyn Hebert**

In response to the numbered questions in Mr. Anderson's November 7, 2000, letter about CRI's existing H<sub>2</sub>S plan, CRI states:

1. The comments are not applicable to the standard operating procedures in effect at CRI. Anytime H<sub>2</sub>S is suspected to be present, CRI employees are required to and do utilize personal H<sub>2</sub>S monitors. As a result of these standard operating procedures, testing occurs continuously whenever there is a possibility of encountering H<sub>2</sub>S.
2. Mr. Anderson's letter mistakenly assumes CRI's plan requires facility wide sensors and constant testing for H<sub>2</sub>S. Sections 25.9.1 and 25.9.3 of the company handbook simply note that it is standard industry practice to require testing at sites designated as "H<sub>2</sub>S areas" or when operational history suggests that certain areas present "a continuous possibility of encountering H<sub>2</sub>S." There are no sites at the CRI facility where a continuous possibility of encountering H<sub>2</sub>S exists. Moreover, anytime H<sub>2</sub>S is suspected, CRI employees are required to and do utilize personal H<sub>2</sub>S monitors to provide for continuous testing.
3. Windscreens have been put in place.
4. Sections 25.11 and 25.12 of the company handbook simply inform CRI employees about standard procedures used at well sites. The CRI facility is neither a well site nor an H<sub>2</sub>S site.
5. The first portion of paragraph 5 of Mr. Anderson's letter fails to note that Section 25.14 of the company handbook outlines the topics discussed in the handbook. The remaining portion of paragraph 5 is confusing and appears to be an effort to impose additional operating conditions on the CRI facility which are arbitrary and have no basis in fact.
6. The telephone numbers of the agencies to be notified in the event of any emergency are at the CRI facility and CRI's offices in Hobbs. Please note that Lea County does not have a Fire Marshall.
7. The telephone numbers of the nearby residents to be notified in the event of any emergency are at the CRI facility and CRI's offices in Hobbs.



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**

Governor

**Jennifer A. Salisbury**

Cabinet Secretary

November 7, 2000

**Lori Wrotenbery**

Director

**Oil Conservation Division**

**CERTIFIED MAIL**

**RETURN RECEIPT NO. 7099-3220-0000-5051-1194**

Mr. Ken Marsh  
Controlled Recovery, Inc.  
P.O. Box 388  
Hobbs, NM 88241-0388

**RE: Hydrogen Sulfide (H<sub>2</sub>S) plan  
Controlled Recovery, Inc.  
S/2 N/2 and the N/2 S/2 Section 27, Township 20 South, Range 32 East, NMPM  
Lea County, New Mexico**

Dear Mr. Marsh:

The New Mexico Oil Conservation Division (OCD) has received the Controlled Recovery, Inc. (CRI) letter dated August 22, 1997 regarding the hydrogen sulfide (H<sub>2</sub>S) prevention and contingency plan to protect public health. After reviewing CRI's H<sub>2</sub>S plan, the OCD has the following comments.

1. Section 25.6 Areas where H<sub>2</sub>S may be present or suspected shall be periodically tested to determine employee exposure to H<sub>2</sub>S. Testing should be repeated when a change occurs that could have an effect on H<sub>2</sub>S concentrations.

**CRI should specify the frequency as to the periodic testing. Is it to be hourly, daily or weekly? Also, please specify the types of changes that would trigger repeated testing.**

2. Section 25.9.3 (in part) Detection alarm systems are installed on many permanent sites where a continuous possibility of encountering H<sub>2</sub>S is possible. These electronic detection units continuously monitor the area in which the sensor heads are located, whether stationary or portable.

**H<sub>2</sub>S detection alarm systems were not in operation during the last OCD facility inspection performed on May 31, 2000. What is the backup system presently being used, and what are the frequency, monitoring and recording procedures for this system? Please specify the location of the sensor head with respect to the ground surface or hatch opening and the proximity to the tanks, pits and other items that have the potential to produce or emit H<sub>2</sub>S.**

3. Section 25.10.1 You should be familiar with windsocks and wind direction indicator locations and use them to maintain an upwind position.

**Windssocks and wind direction indicators were not observed during the last OCD facility inspection performed on May 31, 2000. Wind socks or other indicators should be repaired or installed.**

4. 25.12 (in part) Condition signs are commonly used to communicate the current conditions at most well sites containing H<sub>2</sub>S. They will generally be colored flags displayed on a large sign and consist of three different colors to indicate the condition stage.

**Colored flags were not observed on the last OCD last facility inspection performed on May 31, 2000. Is this procedure currently being implemented?**

5. Sections 25.14.3 Procedures for operating conditions; 25.14.3.1 Normal operations; 25.14.3.2 Potential Danger; and 25.14.3.3 Extreme Danger.

**What are the H<sub>2</sub>S levels that trigger these operating conditions? The operating conditions for workers may differ from the H<sub>2</sub>S prevention and contingency plan that must be implemented to protect public health.**

**For the protection of public health and to prevent development of harmful concentrations of H<sub>2</sub>S, at least 1000 gallons of an H<sub>2</sub>S treatment chemical or an equivalent amount of chemical in concentrate form should be stored on-site at all times. H<sub>2</sub>S treatment chemicals should be replaced periodically in accordance with the manufacturer's stated shelf life. Expired H<sub>2</sub>S treatment chemicals may be disposed of in the evaporation ponds.**

**The facility operator must develop a prevention and contingency plan for ambient H<sub>2</sub>S levels to protect public health. The plan must address how the operator will monitor for H<sub>2</sub>S to ensure the following:**

- a. **If H<sub>2</sub>S of 1.0 ppm or greater leaves the property;**
    - i. **the operator must notify the Hobbs office of the OCD immediately ;**
    - ii. **the operator must begin operations or treatment that will mitigate the source.**
  - b. **If H<sub>2</sub>S of 10.0 ppm or greater leaves the property:**
    - i. **the operator must immediately notify the Hobbs office of the OCD and the following public safety agencies:**
      - New Mexico State Police;**
      - Lea County Sheriff; and**
      - Lea County Fire Marshall;**
    - ii. **the operator must notify all persons residing within one-half (1/2) mile of the fence line and assist public safety officials with evacuation as requested; and**
    - iii. **the operator must begin operations or treatment that will mitigate the source.**
6. Section 25.14.8 Agencies to be notified in the event of an emergency. Includes definitions of emergencies at varying degrees.

**There are no agencies listed in this section. In an event of an emergency CRI should immediately notify the Hobbs office of the OCD and the following public safety agencies:**

**New Mexico State Police;  
Lea County Sheriff; and  
Lea County Fire Marshall.**

7. Section 25.14.9 A list of all residents, their location and phone numbers within a two mile radius of exposure.

**The residents and the contact numbers are not listed. In the event of an emergency CRI should notify all persons residing within at least one-half (½) mile of the fence line and assist public safety officials with evacuation as requested.**

The H<sub>2</sub>S plan provided by CRI is primarily for worker safety. Rule 711 requires a H<sub>2</sub>S prevention and contingency plan to protect public health. **CRI must submit a plan for review and approval to the OCD by December 7, 2000.**

If you have any questions please do not hesitate to contact me at (505) 827-7152

Sincerely,



Roger C. Anderson  
Environmental Bureau Chief

RCA/mjk

xc with enclosures:

Hobbs OCD Office  
Michael H. Feldewert  
File

CAMPBELL, CARR, BERGE  
& SHERIDAN, P.A.  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN  
MICHAEL H. FELDEWERT  
TANYA M. TRUJILLO  
JACK M. CAMPBELL  
1916-1999

JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
FACSIMILE: (505) 983-6043  
E-MAIL: law@westofpecos.com

September 15, 2000

FOR SETTLEMENT PURPOSES ONLY

HAND-DELIVERED

Ms. Marilyn S. Hebert  
New Mexico Department of Energy, Minerals and Natural Resources  
Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505

Re: Controlled Recovery, Inc.

Dear Lynn:

In furtherance of the settlement discussions which began at our August 8<sup>th</sup> meeting, enclosed please find a revised closure plan dated September 1, 2000, along with supporting letters from David Boyer (hydrogeologist), James R. Woods (geological engineer), and Mark Turnbough (Ph.D., Environmental Policy). Please note that CRI has put together this September 1<sup>st</sup> closure plan for settlement discussion only and that it is not intended to supercede or supplement the 1997 plan previously accepted by the Division.

If the Division finds this plan acceptable, CRI will obtain and furnish costs estimates from third party contractors pursuant to Rule 711.B(1)(i).

Sincerely,

  
Michael H. Feldewert

MHF/ras  
Enclosures  
cc. w/ enclosures:  
Roger Anderson  
Ken Marsh

OIL CONSERVATION DIV.  
00 SEP 15 AM 3:53

**CRI**  
**CONTROLLED RECOVERY INC.**

P.O. BOX 388, HOBBS, NM 88241 (505) 393-1079

September 1, 2000

Oil Conservation Division  
Santa Fe, NM

OIL CONSERVATION DIV.  
00 SEP 15 AM 3:53

Re: Controlled Recovery, Inc.  
S/2, N/2 and the N/2, S/2 Section 27, Township 20 S, Range 32 E, NMPM,  
Lea County, New Mexico

Closure Plan

This plan is submitted for compliance with OCD Rule 711 and Order R9166 to close the facility to protect public health and the environment.

- Task 1) Lock gates, post closed, no trespassing signs. No new material will be acceptable.
- Task 2) Drain water from produced water receiving tanks, pits 1a and 1b (lined skim pits) to 3a. Remove residue from 3-750 bbl. tanks to 2a and 2b for drying.
- Task 3) Remove oil from treating plant to purchaser, drain all lines, remove untreated product to Pit 13.
- Task 4) Allow fluids to evaporate and dry.
- Task 5) Return unused boiler fuel to supplier.

- Task 6) Push pits 2 a, b, c, 4, 5, 6, which have contained sump material, drilling mud, drilling cuttings, work over solids, and other non-hazardous oilfield wastes into 3d. Scrape residue from 3a, 3b, and 3c, which have contained produced water and wash water, and move to 3d. Any liquids or viscous material will be mixed with dry solids. Soil borings will be conducted in pits 3a, 3b, and 3c to determine vertical extent of hydrocarbons.
- Task 7) Move liner and material from 1a and 1b to 3d.
- Task 8) Move liner and materials from 16, which has contained bottom sediment with paraffin, to 3d.
- Task 9) Move 7, 8, 9, 10, 11, and 12, which have contained sump material, drilling mud, drilling cuttings, work over solids, and other non-hazardous oilfield wastes, to 3d. Any liquids or viscous material will be mixed with dry solids.
- Task 10) Cover 3d with 12" of caliche and coarse native material, contoured to prevent wind and water erosion.
- Task 11) Move material, liner, and nets from 13, which has contained bottom sediment and water, to solids area. Any remaining liquids or viscous material will be mixed with dry solids. Cap solids area with 12" caliche and coarse native material. Contoured to prevent wind and water erosion.
- Task 12) Conduct NORM survey.
- Task 13) Record with Lea County clerk a notice that the site has been used as an oilfield disposal and treatment facility.
- Task 14) OCD to inspect and release financial assurance obligation within 30 days of inspection.

**CRI**  
**CONTROLLED RECOVERY INC.**

P.O. BOX 388, HOBBS, NM 88241 (505) 393-1079

September 1, 2000

Mr. James R. Woods  
P.O. Box 1417  
Socorro, New Mexico 87801

Dear Mr. Woods:

CRI has prepared a revised closure plan for our site in Section 27, Township 20 South, Range 32 East, NMPM Lea County, N.M. to comply with OCD Rule 711.

Attached please find:

- 1) CRI proposed closure plan
- 2) Site map
- 3) OCD Rule 711
- 4) OCD Order No. R9166
- 5) Oil and gas act NMSA 1978, Section 70-2-12
- 6) Report by James I. Wright, February 1990

The average annual rainfall is 9 inches.

CRI requests that you review the materials, visit the site, and conduct any other research necessary to determine if the closure plan will protect public health and the environment as per OCD Rule 711.

Sincerely,

  
Ken Marsh

OIL CONSERVATION DIV.  
00 SEP 15 AM 3:53





**NESCO - NEW MEXICO, INC.  
ECOLO SOUTHWEST LLC**

P.O. Box 1417

Socorro, New Mexico 87801

(505) 835-0377 • 835-0573

Sept 8, 2000

Mr. Ken Marsh  
Controlled Recovery Inc.  
Box 388  
Hobbs, New Mexico 88241

Dear Mr. Marsh,

This letter is in response to your letter of September 1, 2000 where you request that I review your Closure Plan for CRI's oil treating plant located in S/2 and the N/2, S/2 Section 27, Township 20 S, Range 32 E, Lea County, New Mexico.

After reviewing the report by James I. Wright and visiting CRI's Plant Site, I have gleaned the following conclusions.

- A) The Triassic and Permian Red Beds, that underlie the shallow Quaternary alluvium, consist predominately of clays and siltstones and would stop any percolation of fluids through these red beds.
- B) The ground water movement through alluvium in the area of CRI's Plant is to the northwest towards the playa lake Laguna Toston.
- C) Laguna Toston has a surface area of 160 acres and has been used as a disposal pond by a potash company.
- D) It has been proven by bailing tests performed on test wells, that the alluvium has very low permeability.
- E) Ms. Rozanne Johnson, Bacteriologist, reports that the water analyzed from the alluvium wells was unfit for human or animal consumption. The Plant site does not have underlying ground water of sufficient quantity or quality to provide water for local usage by livestock or humans.
- F) The location of the CRI Plant site "speaks for itself" as to exposure to humans and wildlife.
- G) Due to the lack of potable drinking water, it is very unlikely to see any future subdivisions for this area.
- H) Any seepage from CRI's site will infiltrate the alluvium into the red bed subsurface and then migrate towards Laguna Toston.

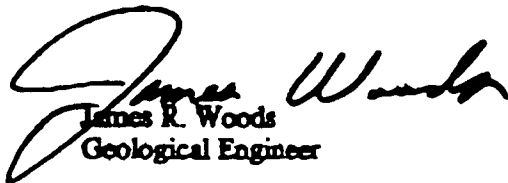
CRI

page 2

I) Prior to initiations operations the site was inspected by a representative of the OCD to determine that the plant had proper fences, gate and cantileguards, dikes and berms needed to assure safe plant operation.

J) In granting the CRI application, the OCD found that the plant should not endanger fresh water, and would prevent waste by allowing the recovery of otherwise unrecoverable oil.

In my opinion, CRI's "Closure Plan" fulfills all of the requirements of OCD Rule and order R9166 to protect public health and the environment.



James R. Woods  
Geological Engineer



**NESCO - NEW MEXICO, INC.  
ECOLO SOUTHWEST LLC**

P.O. Box 1417

Socorro, New Mexico 87801

(505) 835-0377 • 835-0573

**RESUME**

**JAMES R. WOODS  
P.O. BOX 1417  
SOCORRO, NEW MEXICO 87801**

**PERSONAL STATISTICS:**

Born: San Angelo, Texas 12-10-31

Health: Excellent

Married: Judy Nalda Woods

Children: Three boys, one step daughter, one step son

Military: US Army 1951 to 1955

Born and raised on a sheep and cattle ranch in San Angelo, Texas

**EDUCATION:**

One year at New Mexico Institute of Mining & Tech.

Four years at the University of New Mexico- B.S. Geological Engineering

**PROFESSIONAL EXPERIENCE:**

1986 to present: Geo-Hydrological reports, Environmental Assessments Phase I & II.

Treating contaminated soil and water. Tracing of hydrocarbon plumes. Design and installation of cathodic protection systems.

Own and operate ranch in Socorro County New Mexico.

1980 to 1986: Engineering design and operation of Red Mountain Oilfield Waterflood in McKinley County New Mexico.

Own and operate a sheep and cattle ranch in Lincoln County New Mexico.

1980 to 1983: Geological consulting in New Mexico and Utah.

Operation of a cattle ranch in Catron County New Mexico.

1967 to 1983: Started and developed Woods Oil & Propane, Inc., a petroleum marketing company, that employed 65 people. I served as general Manager.

Owned and operated a cattle ranch in Catron County New Mexico.

1962 to 1967: Worked for The Superior Oil Company and Sinclair Oil Company doing geological field work and mapping in New Mexico and Utah.

1956 to 1962: Attended college and helped my father work his cattle ranch in Catron and Valencia Counties New Mexico.

**NESCO - NEW MEXICO, INC.**

P.O. Box 1417

Socorro, New Mexico 87801

(505) 835-0377 • 835-0573

**PROFESSIONAL ASSOCIATIONS**

MEMBER NEW MEXICO GEOLOGICAL SOCIETY

MEMBER OF NATIONAL ASSOCIATION OF CORROSION ENGINEERS

NEW MEXICO CONTRACTORS LICENSE # 031572

PETRO-TITE TANK TESTING CERTIFICATE # 314113577

UNDERGROUND TANK INSTALLER CERTIFICATE # 063

MEMBER NATIONAL SOILS ASSOCIATION

CERTIFIED SITE ASSESSOR

**NON-PROFESSIONAL ASSOCIATIONS**

DEMOCRATIC COUNTY CHAIRMAN

BOARD OF DIRECTORS UNITED NEW MEXICO BANK OF SOCORRO

BOARD OF REGENTS AT NEW MEXICO INSTITUTE OF MINING &amp; TECH

BOARD OF DIRECTORS BELEN SAVINGS AND LOAN

BOARD OF DIRECTORS NEW MEXICO DEPT OF COMMERCE &amp; INDUSTRY

BOARD OF DIRECTORS SOCORRO CHAMBER OF COMMERCE

BOARD OF DIRECTORS SOCORRO PUBLIC LIBRARY

ADVISOR TO NEW MEXICO BORDER COMMISSION

**CRI**  
**CONTROLLED RECOVERY INC.**

P.O. BOX 388, HOBBS, NM 88241 (505) 393-1079

September 1, 2000

Mr. David Boyer  
P.O. Box 1613  
Hobbs, New Mexico 88240

OIL CONSERVATION DIV.  
00 SEP 15 AM 3:53

Dear Mr. Boyer:

CRI has prepared a revised closure plan for our site in Section 27, Township 20 South, Range 32 East, NMPM Lea County, N.M. to comply with OCD Rule 711.

Attached please find:

- 1) CRI proposed closure plan
- 2) Site map
- 3) OCD Rule 711
- 4) OCD Order No. R9166
- 5) Oil and gas act NMSA 1978, Section 70-2-12
- 6) Report by James I. Wright, February 1990

The average annual rainfall is 9 inches.

CRI requests that you review the materials, visit the site, and conduct any other research necessary to determine if the closure plan will protect public health and the environment as per OCD Rule 711.

Sincerely,



Ken Marsh

## **QUALIFICATIONS AND CREDENTIALS**

**OF**

**David G. Boyer, P.G.**

### Qualifications Summary

David G. Boyer is a Professional Geologist specializing in Hydrology and Water Resources with more than 25 years experience working in New Mexico and Arizona.

Mr. Boyer has enjoyed a successful career as a Hydrogeologist, both in the public and private sectors. Mr. Boyer served as a research and teaching assistant and Hydrologist for the University of Arizona for eight years. After completion of his Master's Degree in 1978, Mr. Boyer joined the New Mexico Environment Department as a Water Resources Specialist in Hydrogeology. Mr. Boyer founded the Environmental Bureau of the New Mexico Oil Conservation Division in 1984 and served as Bureau Chief until 1991. Mr. Boyer returned to the private sector in 1991 and has held senior positions with K.W. Brown Environmental Services, RE/SPEC Inc., Los Alamos Technical Associates, Inc., and Covenant Technical Associates, Inc.

Mr. Boyer broadens SESI's areas of expertise to include: Hydrological Investigation and Characterization, Groundwater Quality Monitoring and Evaluation, Permitting and Compliance Actions for State and Federal Groundwater Protection Programs, Regulatory Development, Analysis, and Negotiation, and Expert Witness and Litigation Support in the area of Groundwater and Water Resources.

### Education

M.S. in Hydrology and Water Resources (Groundwater), University of Arizona, Tucson, AZ. (1978)

B.S. in Hydrology and Water Resources, University of Arizona, Tucson, AZ. (1965)

### Registrations and Affiliations

American Institute of Hydrology (Certification # 85-535)

Association of Groundwater Scientists and Engineers (CGWP #221)

Registered Professional Geologist (Wyoming, PG-2390)

Gas Research Institute, Research Coordination Council: Chairman, Environment & Safety Panel (1994 -99)

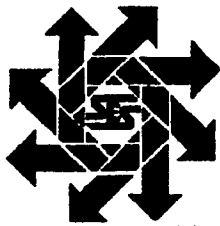
Association of Groundwater Scientists and Engineers

New Mexico Oil & Gas Association (1991-97)

Permian Basin Petroleum Association (1991-96)

Texas Independent Producers & Royalty Association (1991-96)

Member, New Mexico Water Quality Control Commission (1986-91)



P.O. Box 1613  
703 E. Clinton Suite 103  
Hobbs, New Mexico 88240  
505/397-0510  
Fax 505/393-4388  
www.sesi-nm.com

## **Safety & Environmental Solutions, Inc.**

September 6, 2000

Mr. Ken Marsh  
Controlled Recovery Inc.  
P.O. Box 388  
Hobbs, New Mexico 88241

Re: Proposed Closure Plan for CRI Facility at Halfway, NM

At your request, I have reviewed the proposed revised closure plan for your facility located in Section 27, Township 20 South, Range 32 East, NMPM Lea County, N.M. The review was conducted to determine whether the plan will comply with New Mexico Oil Conservation Division (OCD) General Rule 711, specifically Section B (1) (i) which requires a closure plan to close the facility to protect public health and the environment.

The location of the permitted facility already minimizes exposure to humans and sensitive receptors, and a properly designed and implemented closure plan completes such protection. The facility is located at a site which does not have underlying groundwater of either sufficient quantity or quality to provide water for domestic, industrial, or stock use. This was determined by technical data entered into evidence during the OCD hearing granting the original permit for the facility (Order R-9166, April 27, 1990). Indeed, the nearest body of water, Laguna Toston immediately north of the facility, is a salt-water lake used for brine disposal by a potash mine. Closure needs include evaporation of water from existing disposal ponds and removal of hydrocarbon residue. High summer temperatures, low relative humidity, and an annual rainfall of approximately 9 inches enhance evaporation at the site. The low rainfall, when coupled with the actions to be performed during closure, will effectively prevent leaching and migration of any remaining hydrocarbon material.

The surrounding area is used for ranching and no residences (with the exception of the onsite watchman) or subdivisions are located within several miles of the site. Without any potable groundwater existing in the vicinity of the site, it is unlikely that any current or future land development will occur. Therefore, future exposure, if any, to humans would occur through the occasional visit by a rancher, or by a passerby in a vehicle on the adjacent highway. Closure needs to protect humans and sensitive receptors include removal of fluids from the existing pits, and capping of remaining hydrocarbon solids to prevent wind and water erosion with subsequent exposure of the underlying hydrocarbons and airborne migration of the material.

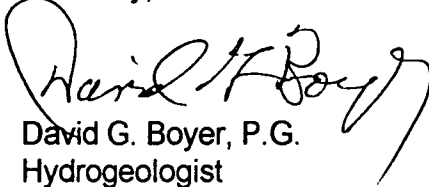
Mr. Ken Marsh  
September 6, 2000

Page 2

The proposed closure plan satisfies the criteria discussed in the above paragraphs. Therefore, the proposed closure plan is expected to provide protection for human health and the environment at the subject site. Movement of hydrocarbon material to air, soil, groundwater or surface water by the usual forces of nature will be prevented by the actions to be taken at the time of closure. Additionally, notice of past use as an oilfield treatment and disposal facility will be made to the Lea County Clerk where it will be part of the public record.

If you have any questions regarding this letter, please contact me at address and phone number above.

Sincerely,



David G. Boyer, P.G.  
Hydrogeologist



**CRI**  
**CONTROLLED RECOVERY INC.**

P.O. BOX 388, HOBBS, NM 88241 (505) 393-1079

September 1, 2000

Mark Turnbough, PhD  
213 South Camino Del Pueblo  
Bernalillo, New Mexico 87004

Dear Mr. Turnbough:

CRI has prepared a revised closure plan for our site in Section 27, Township 20 South, Range 32 East, NMPM Lea County, N.M. to comply with OCD Rule 711.

Attached please find:

- 1) CRI proposed closure plan
- 2) Site map
- 3) OCD Rule 711
- 4) OCD Order No. R9166
- 5) Oil and gas act NMSA 1978, Section 70-2-12
- 6) Report by James I. Wright, February 1990

The average annual rainfall is 9 inches.

CRI requests that you review the materials, visit the site, and conduct any other research necessary to determine if the closure plan will protect public health and the environment as per OCD Rule 711.

Sincerely,

  
Ken Marsh

**MARK TURNBOUGH Ph.D.  
ENVIROMENTAL COMPLIANCE  
213 S. CAMINO DEL PUEBLO  
BERNALILLO, NEW MEXICO 87004  
505-867-6990  
FAX 505-867-6991**

September 11, 2000

Mr. Ken Marsh  
Controlled Recovery, Inc.  
P.O. Box 388  
Hobbs, New Mexico 88241

Re: CRI Closure Plan

At your request, I have reviewed the proposed closure plan for the CRI Facility located in Section 27 township 20 south, range 32 east, NMPM ( Lea County) New Mexico in order to provide an opinion on compliance with the requirements of OCD Rule 711 and OCD order No. R9166.

In the process of evaluating the CRI closure plan I reviewed the following documents:

- 1) CRI site map
- 2) OCD Rule 711
- 3) OCD Order No. R 9166
- 4) Section 70-2-12 NMSA 197 (Oil and Gas Act)
- 5) Climate Data for the region of interest
- 6) Geohydrology Data used to support the original CRI permit application to OCD

In addition I have inspected the CRI Facility and surrounding area on four separate site visits.

The purpose of this evaluation is to make a determination of whether the proposed closure plan contains measures that are sufficient to protect the public health and the environment pursuant to Rule 711.

In that context, the plan should be viewed as a set of supplementary tasks that enhance the intrinsic capabilities of the permitted site to isolate contaminated material from the human population and the surrounding environment.

To those ends, the site is remote to human population. It is likely to remain remote to future development. The site is located on top of a geologic formation (Chinle Claystone) that virtually assures isolation of any contamination from ground water resources (even if any existed in the vicinity). The site is not subject to surface water run-on or run-off. There are no ephemeral or perennial streams on or near the site.

The closure plan consolidates material on the existing site to a relatively small area (see tasks 2, 6, 8 and 9). Subsequently the consolidated area (3d) is capped with caliche and coarse native material (task 10). The solids area is also consolidated and capped (Task 11).

Beyond consolidation of materials into a relatively small zone, the entire area is secured by proper fencing and signage. Moreover, proper notice is provided to OCD and Lea County for long term reference.

Also, given the climate conditions of the area it is reasonable to assume that the site will not be adversely affected by water erosion processes.

In short, the characteristics of the site in conjunction with the tasks described in the closure plan should be expected to provide long-term protection of the public health and the environment.

If you have any questions, please call me at 1-800-914-4380.

Sincerely,

*Mark Turnbough Ph.D.*

Mark Turnbough, Ph.D.

**Mark Turnbough, PhD**  
**Land Use Assessment**

**Water Resource Management / Permitting / Planning / Regulatory Compliance**

Mr. Turnbough has managed and provided work product on several significant multi-disciplinary site selection, characterization, environmental assessment and permitting tasks and projects. Those projects range from large - scale water resource development and management programs to the permitting and licensing of critical environmental facilities, e.g. nuclear power plants (HL&P South Texas Project and Texas Utilities Comanche Peak), major transmission line rights of way (ROW), hazardous/infectious waste treatment systems, waste disposal facilities and experimental energy storage systems at White Sands Missile Range.

In 1987 he managed the third party environmental assessment that was used by the U.S. Bureau of Reclamation to allow the re-assignment of agricultural water rights in the Rio Grande Valley of El Paso County to municipal and industrial uses. The model he developed for making water resource re-allocation decisions in El Paso County (USBR Rio Grande Project) was subsequently utilized to provide a justification for converting agricultural water diversions from the Lower Rio Grande to municipal use in Starr, Willacy, Cameron and Hidalgo Counties. The value of the approach is that it eliminated the need for lengthy and expensive Environmental Impact Statements (EIS) to re-distribute water appropriations within existing water projects. Ultimately, Mr. Turnbough was asked to describe the approach to the Committee on Energy and Natural Resources of the United States Senate (May 10, 1994).

During the same general time frame (1986 to 1994) he prepared the environmental assessments and environmental information documents required for the opening of the Santa Teresa International Border Crossing (New Mexico / Mexico). Concurrently, he worked with co-owners, Dr. Tim Louis and Mr. Charlie Crowder, to master plan the original Santa Teresa industrial and residential complex (86,000 acres). That process included a preliminary assessment of the nature and extent of the water resources/rights associated with the original project.

On behalf of El Paso and Hudspeth Counties, from 1988 to 1991 he recruited and managed the technical team that evaluated the proposed Texas Low Level Radioactive Waste Disposal site at Ft Hancock, Texas. The results of that evaluation were used in District Court to prevent the state of Texas from designating an unsuitable site.

In 1997 and 1998 Mr. Turnbough provided consulting expertise to Phillips Petroleum Company in litigation regarding a pipeline leak near Borger, Texas. Phillips was able to negotiate a favorable settlement. Also in 1997 and 1998, he provided expertise to the Richey Oil Company in opposition to a 27,000 acre sludge project adjacent to the historic Eagle Mountain Ranch in Hudspeth County, Texas. The Texas Natural Resources Conservation Commission withdrew its prior approval of the project.

From 1992 through 1999 Mr. Turnbough managed the permitting and re-permitting of the controversial Camino Real Landfill in Sunland Park (the largest facility of its kind in New Mexico). Under Mr. Turnbough's direction, Camino Real ultimately received the Solid Waste Association of North America (SWANA) Landfill Excellence Award for the best landfill in North America (1997).

From 1994 through 1999, Mr. Turnbough also managed the site selection, characterization, design, permitting, construction and regulatory compliance for three additional regional landfills in New Mexico; Sand Point (Carlsbad), Tri-Sect (Valencia

County) and Lea County Regional Landfill. In the process of permitting the Lea County facility, Mr. Turnbough was able to secure a ground water monitoring exemption based on the geologic qualities of the site selected for Lea County. Since 1991, Mr. Turnbough has coordinated the permitting of over half of the total solid waste disposal capacity in the state of New Mexico.

Currently, Mr. Turnbough is a regulatory and environmental consultant to the 16,000 acre Waste Control Specialists facility in Andrews County, Texas. It is the first hazardous (RCRA) / toxic (TSCA) and radioactive waste management facility of its kind in the United States (permitted under post LDR regulations). It was permitted in just under 18 months. He continues to serve as the lead consultant for Camino Real in the development of Title V and NSPS Air Quality permits for the parent company, Waste Connections, Inc. He is also a consultant For Chandler and Associates in the assessment of a large and complex set of oilfield contamination cases in Johnson and Lawrence Counties, Kentucky. Mr. Turnbough was recently retained by the law firm of Kemp-Smith as a water development consultant for projects in the El Paso, Texas region. Mr. Turnbough also has recently provided consulting services to Morrison-Knudsen, Inc. (M-K has changed its name to the Washington Group) in the development of proposal documents to the U.S. Department of Energy (DOE) for the continued operation of the DOE's Waste Isolation Pilot Plant (WIPP) [transuranic disposal facility] in Eddy County, New Mexico. He is, in addition, providing consulting expertise to Controlled Recovery, Inc. (CRI) on oilfield waste containment in the Permian Basin.

Mr. Turnbough was appointed on May 1, 2000 to serve on the New Mexico Environment Department's new Radioactive Materials Advisory Committee which has been tasked to write new radioactive materials license, inspection and administrative fee regulations. Mr. Turnbough participated in the writing of the New Mexico Solid Waste Management Regulations (EPA Sub-title D) and the New Mexico Recycling Rules. During the writing of the Sub-title D regulations Mr. Turnbough provided a direct interface with EPA Region 6 to facilitate changes required for New Mexico to achieve primacy over the program. In addition, he has provided NMED with detailed impact assessments of its proposed rules.

Moreover, he has coordinated the development and passage of several economic development packages in the New Mexico Legislature. In 1998, for example, he coordinated the passage of a \$500,000,000.00 incentive package to help recruit uranium enrichment industries to Lea County, New Mexico.

Essentially, Mr. Turnbough provides task definition/management and regulatory/political interface for clients whose projects require multi-disciplinary expertise. The approach is a cost effective alternative to hiring engineering firms to manage activities that typically range well beyond the engineering function. It involves using the appropriate legal and regulatory framework to structure the client's project. That structure includes definition of expertise necessary to comply with state and federal rules. The task definition achieved in this approach tends to reduce scopes of work for contractors / firms to only those areas in which they have demonstrated expertise. Consequently, the client does not end up paying A&E firms to "learn" how to successfully complete the project.

**RESUMÉ****MARK W. TURNBOUGH, PhD****FIELDS OF EXPERIENCE:**

**General Background:** Includes multi-disciplinary training and experience in land use planning, environmental policy, technology assessment, impact analysis, causal modeling, statistical research, socioeconomics/demography.

**Consulting Experience:** Primary areas of activity include regulatory permitting/compliance monitoring, environmental impact assessment, site suitability analysis, site selection, site characterization, analysis of land uses, statistical research and computer applications: Geographic Information Systems and Predictive Models.

**Synopsis of Selected Current and Recent Consulting Activity**

(For specific dates and locations see Page 5, EXPERIENCE section).

As environmental consultant to CRI, Inc. provides regulatory expertise in opposition to a proposal by the state of New Mexico to co-mingle oilfield wastes with solid waste (sub-title D) in disposal cells permitted for sub-title D wastes (2000-present).

As environmental consultant to Lea County, New Mexico provided interface with U.S. Department of Energy (DOE) in the preliminary development a risk based compensation plan linked to the operation of the DOE Waste Isolation Pilot Plant (WIPP) (1999-2000).

As environmental consultant to Raymond G. Sanchez and Robert Desiderio, attorneys at law, provides project management and coordination for site assessments on Maloof properties in New Mexico (2000-present).

As environmental consultant to the El Paso, Texas based law firm of Kemp-Smith, provides expertise for the selection and development of water resources for use by the City of El Paso (2000-present).

As an environmental / systems consultant to Morrison-Knudsen, Inc., provides regulatory and project development guidance on DOE contracts at Los Alamos National Laboratory and the WIPP site (both located in New Mexico) (2000- present).

As environmental consultant to Chandler and Associates, provides expertise on the assessment of a large and complex oilfield contamination case in Johnson and Lawrence Counties, Kentucky(1999-present).

As lead consultant on the Lea County Landfill project managed site selection studies and permit document preparation for submission to the New Mexico Environment Department (Permit granted

1999).

As environmental consultant to WCS, LLC provides primary point of contact for U.S. Department of Energy (Headquarters). Provides regulatory guidance for the development of permits and licenses for additional waste streams on the facility's New Mexico properties. Also provides systems support and compliance monitoring (1995-present).

As environmental consultant to Harlan Richey, provided expertise and expert testimony in opposition to a proposed 27,000 acre sludge application project adjacent to the historic Eagle Mountain Ranch in Hudspeth County, Texas. The Texas Natural Resources Conservation Commission (TNRCC) subsequently withdrew its prior approval of the project (1997-1998).

As environmental consultant to Phillips Petroleum, Inc., provided expertise and expert witness testimony (deposition only—case was settled in favor of Phillips) on a complex land use/ groundwater contamination case (1997-1998).

As environmental consultant/project manager to Camino Real Environmental Center (CREC), managed the development of 3 solid waste permit applications for boundary modification, recycling center and landfill permit renewal for the solid waste facility at Sunland Park, (Doña Ana County) New Mexico. (Permits granted 1997). Manages Title V and NSPS permitting as well as on going compliance at the all of the company's facilities.

As environmental consultant/project manager for USA/UNITED WASTE, coordinated the rehabilitation of a permit (solid waste) application for Tri-Sect Landfill in Valencia County, New Mexico. (1998)

As environmental consultant/project manager for CREC, managed the acquisition of a discharge permit for a sludge land application site at the CREC Sunland Park, New Mexico site. (1994)

As environmental consultant/project manager for CREC, managed the development of a permit application for the Eddy County, New Mexico regional landfill (Sand Point Regional Landfill). (Permit granted 1994)

As environmental consultant/project manager for Med-Compliance Services (MCS), managed the development of a permit application for a bio medical waste transfer and processing facility in Albuquerque (Bernalillo County) New Mexico. (Permit granted 1994).

Project required the development of a new processing technology that could meet new state standards.

As environmental consultant to Lower Valley Water District (El Paso County), prepared environmental assessments for Las Azaleas constructed wetlands project, 1993.

As permit consultant to R.R.I., acquired landfill and recycling permits for R.R.I. (NUMEX Landfill) facilities at Sunland Park, New Mexico, 1991.

As environmental consultant to Agra Earth & Environmental, Inc., responsibilities included development of multi-disciplinary data bases for large scale site suitability studies, landfill selection and environmental impact modeling, e.g. aquifer protection plans, geographic information systems and solid waste management plans, 1989 - 1994.

As project manager for El Paso County, (El Paso County versus State of Texas), coordinated 4 year review of Ft. Hancock site suitability for radioactive waste disposal. Developed technical case for plaintiffs. Plaintiffs prevailed on all 25 factual issues. District court decision upheld plaintiffs. State did not appeal, 1988 - 1991.

As Director of Special Projects at the Rio Grande Council of Governments, El Paso, Texas responsibilities included development and management of multi-disciplinary projects that focused primarily on land use and site planning issues in the region, e.g., site selection for landfills, industrial parks, energy storage systems, etc., 1989.

As Principal Planner at Sub-Land, Inc. El Paso, Texas responsibilities included management of environmental and economic feasibility studies for large-scale land use projects, 1986-1987.

As a Senior Staff Policy Analyst/Planner at EH & A Environmental Consultants, Austin, Texas was responsible for the design and implementation of land use, environmental economic baseline and impact studies and other assessments. Also was responsible for various types of specialized studies (regulatory, budgeting and forecasting). Developed and managed computer-based models for environmental planning, e.g. riverine flow impacts on bays and estuaries, predictive model of Brown Pelican flights across transmission lines, predictive models for archeological resources in large scale surveys, 1984-1987.

Expert Witness Experience: Federal and State Court. (Primary areas - environmental assessment, land use analysis, solid waste facility regulations, municipal services assessment and redistricting). Expert testimony in Adjudicatory Hearings on land use issues, e.g. landfill permits and water plans.

In the Academic Community: Taught courses in site planning, anthropology, environmental studies, alternative energy resource investigations, organization theory, industrial expansion analysis, policy typology assessment, public budgeting and fiscal planning.

## **EXPERIENCE**

(Note: Several activities have overlapping/ concurring time frames).

**Environmental Consultant:  
(Regulatory Compliance)**

CRI, Inc.  
Hobbs, New Mexico  
January, 2000 to present.

**Environmental Consultant:  
(Site Assessment)**

Raymond G. Sanchez and Bob Desiderio  
Attorneys at Law



**Environmental Consultant:**  
**(DOE and N.M. Policy)**

Albuquerque, New Mexico  
February, 2000 to present

**Environmental Consultant:**  
**(Water Development Strategy)**

Morrison-Knudsen, Inc.  
Cleveland, Ohio  
March, 2000 to present.

**Environmental Consultant:**  
**(DOE Policy)**

Kemp- Smith Law Firm  
El Paso, Texas  
February, 2000 to present.

**Environmental Consultant:**  
**(Remediation Estimates)**

Lea County, New Mexico  
1999- April, 2000

**Environmental Consultant**  
**(Land Use)**

Chandler and Associates,  
Lufkin, Texas  
July, 1998 to Present.

**Environmental Consultant:**  
**(Land Use Protection)**  
**(Expert Witness)**

Phillips Petroleum  
Bartlesville, Oklahoma  
1997-1998

**Environmental Consultant:**  
**(Remediation Estimates)**  
**(Expert Witness)**

Richey Oil Company  
Tyler, Texas  
(Project located in Hudspeth Co. Texas)  
1997-1998.

**Environmental Consultant:**  
**(DOE and N.M. Policy)**

Triangel (sic) Equities  
El Paso, Texas  
1997-1998

**Environmental Consultant:**  
**(Land Use Analysis)**

Waste Control Specialists, LLC.  
Pasadena, Texas 1995 to Present

**Environmental Consultant:**  
**(Landfill Evaluation)**

Santa Teresa Development, Inc.  
February, 1986 to 1994

**Environmental Permit Consultant:**  
**(Landfill Site Selection, Permitting)**

El Paso County Commissioner's Court  
El Paso, Texas  
1989 to 1991

R.R.L. (Waste Disposal)  
Purchased in 1999 by Waste Connections,  
Inc.

<b>(Biomedical Waste Technology Development) (Compliance Monitoring)</b>	February, 1991 to Present
<b>Environmental Policy Consultant:</b>	Agra Earth & Environmental, Inc. Phoenix, Arizona August, 1989 to 1994
<b>Environmental Consultant: (Land Use)</b>	Horizon Environmental Services Austin, Texas 1989 to Present
<b>Director, Environmental Projects:</b>	Rio Grande Council of Governments El Paso, Texas March 1987 to July, 1989
<b>Professor:</b>	New Mexico State University Land Use Analysis Las Cruces, New Mexico 1988
<b>Principal Planner/Director of Marketing:</b>	Sub-Land, Inc. El Paso, Texas 1986 to 1987
<b>Senior Policy Analyst / Land Use Analyst:</b>	Espey, Huston & Associates, Inc. Austin, Texas 1984 to 1987
<b>Division Chairman:</b>	Social Sciences Wayland University Plainview, Texas 1983
<b>Lecturer - Budgeting and Forecasting:</b>	MPA Program, Texas Tech University Lubbock, Texas
<b>Research Associate:</b>	Center for Energy Research Texas Tech University Lubbock, Texas 1979
<b>Lecturer - Technology Assessment:</b>	Department of Industrial and Systems Engineering (Doctoral Program) Texas Tech University

	Lubbock, Texas 1979
<b>Assistant Division Chairman:</b>	Public Administration/Systems Wayland University Plainview, Texas 1978 to 1983
<b>Administrative Head/Interim Director:</b>	Computer Services Wayland College Plainview, Texas 1976 to 1978
<b>Instructor - Public Policy:</b>	Department of Political Science Texas Tech University Lubbock, Texas 1976
<b>Assistant to City Manager:</b>	City of Plainview, Texas 1976
<b>Research Assistant, Stochastic Models:</b>	Frederick Hartmann, Alfred Thayer Mahan Professor of Maritime Strategy Naval War College 1975
<b>Chairman - Department of Anthropology:</b>	Department of Anthropology Wayland College Plainview, Texas 1971 - 1974
<b>Research Assistant:</b>	Department of Sociology & Anthropology Texas Tech University Lubbock, Texas 1970 - 1971
<b>Technical Writer:</b>	Litton Industries Lubbock, Texas 1969

**EDUCATION (MAJOR FIELDS)**

- Ph.D.:** Systems Theory and Environmental Policy  
Dissertation Topic - Policy Typologies &  
Case Survey Methodologies  
(Environmental Policy Issue—Environmental Resources Management)  
Texas Tech University  
Lubbock, Texas  
August, 1985
- M.A.:** Anthropology/Sociological Theory/Government  
Thesis Topic - Ideal Typology Development  
Texas Tech University  
Lubbock, Texas  
1971
- B.A.:** Anthropology/Sociology/Journalism  
Texas Tech University  
Lubbock, Texas  
1969

**ADVISORY COMMITTEES: (Recent)**

New Mexico Environment Department Radioactive Materials Advisory Committee (Waste Management and Disposal Industry Representative), May 1, 2000 to Present

USEPA Environmental Justice Advisory Committee, 1999 to Present

New Mexico Environment Department, Tire Recycling Advisory Committee, 1995-1996

New Mexico Environment Department, Solid Waste Regulations Revision Advisory Committee, August - December, 1993

Rio Grande Council of Governments, Regional Solid Waste Management Plan (Far West Texas Planning Region), 1993

El Paso City/County Consolidated Data Processing Advisory Board - Oversight of mainframe (IBM 3090) operations for consolidated system, 1989 - 1991

**AWARDS:**

Solid Waste Association of North America (SWANA) Landfill Excellence Award for Best Landfill Operation in North America, 1997

Outstanding Contribution Award - Environmental Design Contest, Waste Education Research Consortium, (Los Alamos National Laboratory, Sandia National Laboratory, University of New Mexico, New Mexico Tech, New Mexico State University and U.S. Department of Energy) May, 1993.

Outstanding Graduate Student Teacher of the Year, Texas Tech University, 1976.

George Mahon Congressional Scholarship Award for Graduate Study of Public Policy, 1974 1975.

Joint Graduate Student/Graduate Faculty Research Grant, "Development of Disaggregative Analysis Software for Decomposition of Large Data Sets", Texas Tech University, 1974.

#### **TECHNICAL REPORTS/PAPERS:**

"Revised Cost Estimates for Remediation of Contaminated Sites on Cantrell et al. Properties in Johnson and Lawrence Counties, Kentucky (Martha Oilfield)" prepared for the Chandler Law Offices and Spivey-Ainsworth Law Firm, July 5, 2000.

"Final Site Assessment and [14 Day Report] for Maloof Holdings at 100 Industrial Avenue, Albuquerque, N.M.", prepared for Raymond G. Sanchez and Robert Desiderio. Submitted to the New Mexico Environment Department, UST Bureau, May 19, 2000.

"Disposition of Pre-Subtitle D Landfills", presented at the SWANA Arid Landfill Symposium, Albuquerque, New Mexico, April 12, 2000.

"Preliminary Cost Estimates for Remediation of Contaminated Sites on Cantrell et al. Properties in Johnson and Lawrence Counties, Kentucky (Martha Oilfield)", prepared for the Chandler Law Offices and Spivey-Ainsworth Law Firm, May 25, 1999.

"Permit Application for Lea County Solid Waste Authority Regional Landfill", prepared for Lea County Solid Waste Authority, Lea County, New Mexico, submitted to Solid Waste Bureau, New Mexico Environment Department (NMED), January, 1998 (Permit granted December, 1998).

"Evaluation of Proposed Longo Construction, Inc. Sludge Application Project (27,000 acres) in southern Hudspeth County, Texas", prepared for Harlan Richey, March 1, 1998.

"Permit Application for Camino Real Environmental Center Regional Landfill and Recycling Center, (Sunland Park, New Mexico), prepared for RRI, Inc., El Paso, Texas, submitted to Solid Waste Bureau, New Mexico Environment Department (NMED), Nov. 1996. (Permit granted August 1997).

"Changing Patterns in Regulatory Frameworks for Incinerator Technology", presented to National Solid

Waste Management Association - Colorado/New Mexico Annual Meeting, Telluride, Colorado, October 11 - 12, 1996.

"Regulation of Incinerator Technology in New Mexico" (joint presentation with New Mexico Environment Department) presented to Interim Committee on Radioactive and Hazardous Waste - New Mexico Legislature, Santa Fe, New Mexico, September 12, 1996.

"Environmental Justice and Landfill Siting in New Mexico", Tom Van Zandt co-author -contract research for C.R.E.C., August, 1996.

"Las Azuleas Constructed Wetlands - Environmental Assessment", prepared for El Paso County, Texas Lower Valley Water District Authority. Submitted to Texas Water Development Board, August, 1994.

"U. S. Bureau of Reclamation as Regional Water Manager - Rio Grande Project", written testimony presented to Senate Sub Committee on Natural Resources (Senator Bill Bradley, Chair) U.S. Senate, Washington, D.C., May, 1994.

"Plainview Independent School District (Hale County, Texas) Redistricting Submission", Prepared for Plainview ISD, Board of Trustees, Submitted to U.S. Department of Justice, Voting Rights Section, August 1993. Pre-clearance Granted.

"Permit Application for Carlsbad/Eddy County, New Mexico Regional Landfill", prepared for Carlsbad/Eddy County, submitted to Solid Waste Bureau, New Mexico Environment Department (NMED), July 9, 1993. (Permit granted 1994).

Nu-Mex Landfill Supplementary Data Report/Documentation of Compliance, Submitted to U.S. Environmental Protection Agency Region 6, Prepared for JOAB, Inc., Sunland Park, New Mexico, May 28, 1993.

"Final Permit Application for Regulated Medical Waste Processing Facility - Albuquerque, New Mexico", prepared for Med Compliance Services, Inc., Submitted to the Solid Waste Bureau, NMED, May 1, 1993. (Permit granted January 1994).

"Brownfield Independent School District (Terry County, Texas) Redistricting Submission", Prepared for Brownfield ISD Board of Trustees, Submitted to U.S. Department of Justice, Voting Rights Section, January 1993. Pre-clearance Granted.

"Floydada Independent School District (Floyd County, Texas) Redistricting Submission", Prepared for Floydada ISD Board of Trustees, Submitted to U.S. Department of Justice, Voting Rights Section, December 1992. Pre-clearance Granted.

"Preliminary Site Selection/Site Characterization of Proposed Carlsbad/Eddy County, New Mexico Regional Landfill", Prepared for City of Carlsbad/Eddy County, New Mexico, Submitted to Solid Waste

Bureau, NMED, August 10, 1992.

"Draft Permit Application for Bio-Medical Waste Processing Facility - Albuquerque, New Mexico", prepared for Med. Compliance Services, Inc., Submitted to the Solid Waste Bureau, NMED, July 15, 1992.

"Documentation in Support of a Bio-Medical Waste Transfer Facility, Las Cruces, New Mexico", Prepared for Med. Compliance Services, Inc., Submitted to NMED and City of Las Cruces, July 1, 1992.

"Transportation Contingency Plan for Bio-Medical Waste Services", Prepared for Med. Compliance Services, Inc., Submitted to the Solid Waste Bureau, NMED, June 15, 1992.

"Documentation in Support of a Proposal to Provide Bio-Medical Waste Services to the New Mexico Hospital Association", Prepared for Med. Compliance Services, Inc., Submitted to Hospital Services Corporation, May 15, 1992.

"Alternative Redistricting Plans for the City of Brownfield, Texas - City Council Precincts", Prepared for the City of Brownfield, Texas, May 15, 1992. Pre-clearance Granted.

"Alternative Redistricting Plans for the Post Independent School District - School Board Trustee Districts", Prepared for the Post Independent School District (Garza County, Texas), June 30, 1992. Pre-clearance Granted.

"Land Use Analysis of Proposed Sunland Park Annexation of Santa Teresa Commercial District" - Expert Testimony Before the New Mexico Boundary Commission, January 25, 26, 1992 for Santa Teresa Community Development, Inc.

"Border Environmental Issues", Prepared Testimony Delivered to the New Mexico Secretaries of Environment and Economic Development on Potential Border Crossings at Santa Teresa and Sunland Park, New Mexico, Las Cruces, New Mexico, January 14, 1992.

"Terry County Commissioner's Precinct Redistricting Submission", Prepared for Terry County, Texas, Submitted to U.S. Department of Justice, Voting Rights Section, January, 1992. Pre-clearance granted.

"Environmental Assessment of Proposed Leviton Site", (Airport Business Park at Santa Teresa, New Mexico), prepared for C. L. Crowder Investment Company, Santa Teresa, New Mexico, September 19, 1991.

"Proposal to Replace MCS Incinerator" (to NMED), Prepared for Med. Compliance, Inc., El Paso, Texas, December, 1991.

"Prepared Testimony on Impacts of Buffer Zones in NMED Proposed Solid Waste Rules", Delivered to New Mexico Environmental Improvement Board - Roswell Hearings, November, 1991.

"Special Use Permit Application for Bio-Medical Waste Processing Facility", submitted to Doña Ana County for Med. Compliance, Inc., El Paso, Texas, September 16, 1991.

Summary of Findings for Nu-Mex Landfill Application Hearing, ("New Mexico Environment Department"), Prepared for JOAB, Inc./Med. Compliance, Inc., El Paso, Texas, August, 1991.

"Compliance Schedule for Bio-Medical Incinerator Pursuant to New Mexico Environment Department Air Quality Control Regulation 2020", Prepared for Med. Compliance, Inc., El Paso, Texas, August 1, 1991.

"Air Quality Permit Application for Proposed Microwave Bio-Medical Waste Processing Facility", Submitted to NMED (Air Quality Control Bureau) for Med. Compliance, Inc. El Paso, Texas, August 1991.

"Who Needs an Assessment?", Presented at National Association of Engineering Geologists Annual Meeting, Chicago, Illinois, October 4, 1991.

"Environmental Assessment of Proposed Belen-Rio Grande Railroad Bridge", prepared for Southern Pacific Transportation Company, San Francisco, California, August, 1991.

"Environmental Assessment of Proposed Sparks Water Delivery System", prepared for El Paso County Lower Valley Water District, El Paso, Texas, June, 1991.

"Environmental Assessment of Proposed Brownsville Channel Dam", Prepared for Brownsville Water Authority, Brownsville, Texas, February, 1991.

"Environmental Information Documents for Santa Teresa International Project", Prepared for Charles Crowder, Santa Teresa, New Mexico, August, 1990.

"Status Report and Proposed Action -- Fabens Landfill", Prepared for El Paso County Commissioner's Court, El Paso, Texas, March 14, 1990.

"Environmental Assessment of Proposed El Paso County River Park", Prepared for El Paso County, Submitted to Texas Parks and Wildlife Department, January 31, 1990.

"Muleshoe Independent School District Redistricting Submission", Prepared for MISD, Submitted to U.S. Department of Justice Voting Rights Section, January, 1990. Pre-clearance Granted.

"An Evaluation of Alternatives for Providing Water Infrastructure to Unplanned Sub Divisions", Prepared for Presentation at the Conference on Sanitation Problems in the Colonias Sponsored by the Institute of Regional Studies, San Diego State University, October 25, 1989, El Paso, Texas.

"Groundwater Discharge Plan/Extension: Mesquite Site, Doña Ana County, New Mexico", Prepared for



Doña Ana County Commissioners, Las Cruces, New Mexico, Submitted to NMED, Santa Fe, New Mexico, August, 1989.

"Testimony Before Special Committee of New Mexico Legislature on Solid Waste Management Problems - Site Selection Criteria on Federal Land", Las Cruces, New Mexico, June, 1989.

"Documentation in Support of Detachment/Annexation of Section 40 from CISD to AISD - Land Use and Socioeconomic Considerations", Prepared for Robert Garrett, Coldwell Banker/Terra Finis, Amarillo, Texas, February, 1989.

"Report of the Special Committee on El Paso City/County Consolidation", Prepared for the El Paso County Commissioner's Court and El Paso City Council, January, 1989.

Written Statement Submitted at Technical Hearings Before the New Mexico Environmental Improvement Division Regarding Proposed New Mexico Solid Waste Management Regulations, Santa Fe, New Mexico, November 17, 1988.

"Mapping Alternatives for Intergovernmental Cooperation in an Environment Characterized by Intergovernmental Conflict", Prepared for Presentation at the American Society for Public Administration, Region VII Conference, El Paso, Texas, November 4, 1988.

"Environmental Information Document (EID) for Water Delivery Plans for the El Paso Lower Valley (Colonias)", Prepared for the El Paso County Lower Valley Water District Authority (1988) for Submission to U.S. Bureau of Reclamation. (EID Approved by Bureau of Reclamation November 4, 1988).

"Fiscal and Land Use Impact Assessment of Lubbock-Cooper Independent School District Boundary Modification", Prepared for Lubbock-Cooper ISD (Texas), June, 1988.

"Preliminary Market Analysis for General Dynamics/El Paso Sand Facility", Prepared for El Paso Sand, Inc., El Paso, Texas, 1988.

"Comparative Land Use Analysis: Santa Teresa, New Mexico, (2400 Acres)", Prepared for Wilson & McIlvaine, Chicago, Illinois, 1988.

"Site Suitability Study for Superconducting Magnetic Energy Storage System - ETM", Prepared for El Paso Electric Company, El Paso, Texas, 1988.

"Waste Management Plan for Doña Ana County, New Mexico", prepared for Doña Ana County Commissioners, Las Cruces, New Mexico, 1988.

"Groundwater Discharge Plan: Mesquite Landfill Site, Doña Ana County, New Mexico", Prepared for Doña Ana County Commissioners, Las Cruces, New Mexico, Submitted to New Mexico Environmental Improvement Division, Santa Fe, New Mexico, 1988.

"Evaluation of Mesa Verde Apartment Project Proposal", Prepared for Paul Lyle & Associates, Plainview, Texas, 1988.

"Southern New Mexico Superconducting Super Collider Site Proposal", DOE Submission, September 1987.

"Far West Texas (Hudspeth County), Superconducting Super Collider Site Proposal", DOE Submission, September, 1987.

"Redistricting Submission (Single Member Election Precincts), Floydada Independent School District", U.S. Department of Justice, Voting Rights Section, 1987. Pre-clearance Granted.

"Preliminary Feasibility Report on Market Alternatives - ASARCO El Paso Property", Prepared for Nebyn Peterson & Associates, Houston, Texas, 1986.

"Comprehensive Evaluation of Infrastructure: Sunland Park/Santa Teresa, New Mexico", Prepared for Santa Teresa Associates, Santa Teresa, New Mexico, 1986.

"Preliminary Feasibility Analysis of Land Use Alternatives - Hueco Ranch (50,000 Acre Parcel)", Prepared for R.O. Anderson, Diamond A Cattle Company, Roswell, New Mexico, 1986.

"Feasibility Analysis of Knapp Properties Development - Franklin Mountain Parcels", Prepared for Texas State Attorney General, In Re: Knapp vs State of Texas (Parks and Wildlife Department), 1986.

"Highway Diversion Channel Modification Study", Prepared for Duke, Inc., Submitted to Army Corps of Engineers, Ft. Worth, Texas, March, 1986.

"Population Projection Update, South Texas Nuclear Power Plant (STP, ER-OL)", Prepared for Houston Light & Power, EH & A Document No. 85739, 1985.

"Montecello-Winfield Mine Area Cultural Resources Model", Prepared for TUMCO, EH & A document No. 95417, 1985.

"Possum Kingdom Inn and Country Club Feasibility Study", Prepared for Leo Appleby, EH & A Document No. 85549, 1985.

"Environmental Assessment of Osuna Road Extension", Prepared for City of Albuquerque, EH & A document No. 85375, 1985.

"Environmental Assessment of Infrastructure Extension on Sandia Pueblo", Prepared for Bureau of Indian Affairs, EH & A Document No. 85403, 1985.

"Existing Environment of the Region of Interest for LCRA's Proposed Deanville Project", Prepared for

Lower Colorado River Authority, EH & A Document No. 841024, 1985.

"Final Report on Pre-Construction Monitoring of Brown Pelican and Migratory Waterfowl Movements Near CP & L's Proposed Laguna Madre Transmission Line", Prepared for Central Power & Lighting, EH & A Document No. 85431, 1985.

"City of Brownfield City Council Redistricting Submission", Prepared for Mayor and City Council of Brownfield, Texas, Submitted to U.S. Department of Justice, Voting Rights Section, May, 1985. Pre-clearance Granted,

"Existing Environment of the Region of Interest for LCRA's Proposed Round Top Project, Phase II, Volume I & II", Prepared for Lower Colorado River Authority, EH & A Document No. 841023, 1985.

"Brownfield Independent School District Redistricting Submission", Prepared for BISD, Submitted to U.S. Department of Justice, Voting Rights Section, May, 1985. Pre-clearance Granted.

"Land Use Assessment for Proposed Comanche Peak Nuclear Power Plant Transmission Lines", Prepared for Texas Power & Light, EH & A Document No. 85090, 1985.

"City of Littlefield City Council Redistricting Submission", Prepared for Mayor and City Council of Littlefield, Texas, Submitted to U.S. Department of Justice, Voting Rights Section, May, 1985. Pre-clearance Granted.

"Littlefield Independent School District Redistricting Submission", Prepared for LISD, Submitted to U.S. Department of Justice Voting Rights Section, February, 1985. Pre-clearance Granted.

"Plainview Independent School District Redistricting Submission", Prepared for PISD, Submitted to U.S. Department of Justice, Voting Rights Section, January, 1985. Pre-clearance Granted.

"Response to the Northwest Area Growth Plan", Prepared for the Austin Chamber of Commerce, EH & A Document No. 84963, 1984.

"Capital Recovery Fees and the Problem of Equity", Proceedings, Western Governmental Research Association, Palm Springs, California, November 16 - 19, 1984.

"Exhibit E, Land Management, Economic and Recreation Resources", prepared for Brazos River Authority, Morris Sheppard Hydroelectric Dam F.E.R.C. Permit, EH & A Document No. 84550, August, 1984.

"Environmental Update, South Texas Nuclear Power Plans (31,400 square miles)", Prepared for Houston Light & Power, EH & A Document No. 94691, 1984.

"Typology construction and Case Survey Methodology", Proceedings, Western Social Science Association, San Diego, California, April 27, 1984.

"An Economic and Social Assessment of Industrial Development Potential - Plainview, Texas", Southwest Polimetrics Report, No. 165, April, 1984.

"Market Analysis Inventory - Pioneer Hi-Bred, Intl., Inc.", Southwest Polimetrics Report No. 164, May, 1984.

"Plainview city Council Redistricting Proposal", Southwest Polimetrics Report No. 161, February 1984. Pre-clearance Granted.

"Lamb County Redistricting Submission", Southwest Polimetrics Report No. 160, October, 1983. Pre-clearance Granted.

"Floyd County Redistricting Submission", Southwest Polimetrics Report No. 155, August, 1983. Pre-clearance Granted.

"Swisher County Redistricting Submission", Southwest Polimetrics Report No. 140, June, 1983. Pre-clearance Granted.

"Deaf Smith County Redistricting Submission", Southwest Polimetrics Report. No. 133, April, 1983. Pre-clearance Granted.

"Hale County Redistricting Submission", Southwest Polimetrics Report No. 120, February, 1983. Pre-clearance Granted.

"Terry County Redistricting Submission", Southwest Polimetrics Report No. 101, November, 1982. Pre-clearance Granted.

"Housing Needs in Plainview", HUD Application for Community Development, September, 1982.

"Hale County Redistricting Submission", Prepared for Hale County Commissioner's Court, Submitted to U.S. Department of Justice, Voting Rights Section, November, 1979. Pre-clearance Granted.

"Biomass Transfer Systems", Report to Office of Technology Assessment, August, 1979.

"Rehabilitation Technologies - A Technology Assessment", (Research Associate - Editor), Texas Tech Press, Prepared for U.S. Department of Health, Education and Welfare, November, 1978.

"Solid Waste Collection Optimization - A Critical Path Approach", Prepared for City of Plainview, Texas, 1978.

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

MEMORANDUM OF MEETING OR CONVERSATION

Y Telephone        Personal        Time 11:05 Date 8-29-00

Originating Party

Ken Marsh

Other Parties

Marty Kelly

Subject

Discussion

Concrete Pipe Waste From Rice  
Engineering "Transite Pipe"

Pipe Held Produced water only - Classify it as  
Exempt, is what I Recommended.

Will Have Norm Soring Done on Each  
Load Going to C.P.T. is what Ken is Requesting.

Conclusions or Agreements

Rice<sup>E</sup> Can call me if they want Additional  
Clarification.

Distribution

Signed

Marty Kelly



*Martinez*

# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**

Governor

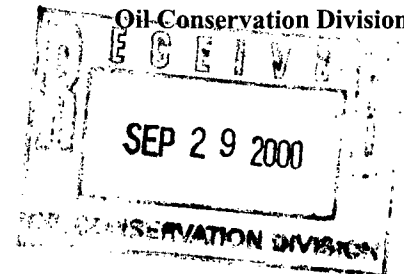
**Jennifer A. Salisbury**

Cabinet Secretary

**Lori Wrotenberg**

Director

**Oil Conservation Division**



September 27, 2000

**CERTIFIED MAIL**

**RETURN RECEIPT NO. 7099-3220-0002-3948-3090.**

Mr. Ken Marsh  
Controlled Recovery, Inc.  
P.O. Box 388  
Hobbs, NM 88241-0388

**RE: Application For Exception to Division Order R-8952  
Controlled Recovery, Inc.  
S/2 N/2 and the N/2 S/2 Section 27, Township 20 South, Range 32 East, NMPM  
Lea County, New Mexico**

Dear Mr. Marsh:

The New Mexico Oil Conservation Division (OCD) has reviewed the Controlled Recovery, Inc. (CRI) file regarding Form C-134 "Application for Exception to Division Order R-8952 for Protection of Migratory Birds." The OCD District 1 Supervisor approved Permit H-76 on July 30, 1991. The OCD also has a letter from Ken Marsh dated April 7, 1997 requesting an exception and signed by the District Supervisor.

Permit H-76 stipulated that the exception was for a pit that was "large" in size and that the pit would be non-hazardous to migratory birds because it would "contain only production water." CRI committed that oil or hydrocarbons would be removed "within 24 hours" and that "all production water goes through a tank skimming process then into a 30' by 40' safety pit then enters open pits which are flagged."

Exhibit "E" to Order R-8952 states: "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."

The OCD has documented the following incidents that have occurred at CRI:

1. The OCD inspected CRI on April 1, 1997, and filed a report on June 27 1997. Item four (4) of that report found that several exposed pits contained oil and were not covered and that netting on some pits was collapsed.
2. On November 3, 1998 the United States Fish and Wildlife Service inspected CRI. A dead migratory bird was recovered from pit 11, an uncovered pit. Violation Notice W581384 was issued on December 11, 1998.
3. An OCD inspection performed on May 31, 2000 and documented in the June 30, 2000 Notice Of Violation report to CRI, found netting collapsed into pit 13 and oil stored or retained in 22 separate pits (item 12).

The OCD finds there is sufficient evidence to revoke the "Exception to Division Order R-8952," Permit H-76 and the letter dated April 7, 1997 signed by the OCD District Supervisor.

Please be advised that all tanks exceeding 16 feet in diameter, and exposed pits and ponds shall be screened, netted or covered. CRI must screen, net or cover all pits, ponds and tanks within 90 days of the date of this letter. CRI may apply for individual exceptions for each pit, pond, or tank location within 60 days of the date of this letter.

If you have any questions please do not hesitate me at (505) 393-6161 extension 102.

Sincerely,



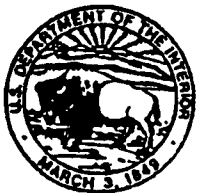
Chris Williams  
District 1 Supervisor

CW/mjk

xc with enclosures:

Roger Anderson, Environmental Bureau Chief  
Michael H. Feldewert  
File

Mr. Michael H. Feldewert  
Campbell, Carr, Berge, Sheridan, P.A.  
P.O Box2208  
Santa Fe, New Mexico 87504-2208



# United States Department of the Interior

ATTACHMENT 7

## FISH AND WILDLIFE SERVICE

Division of Law Enforcement  
2415 Princeton Drive NE, Box D  
Albuquerque, New Mexico 87107

December 11, 1998

Controlled Recovery Inc.  
P.O. Box 388  
Hobbs, New Mexico 88241

Dear Mr Marsh,

During the inspection of your facility on 11/03/98, USFWS Special Agent Doug McKenna recovered one dead meadowlark (*Sturnella* Sp.) from a pit identified by one of your employees as pond 11. The enclosed Violation Notice W581384 has been issued in accordance with the established collateral schedule guidelines for the Federal District of New Mexico.

The instructions for payment or contesting of this Violation Notice are included on the white colored attachment sheet. Please feel free to contact me if you have any questions regarding this matter at our Albuquerque Field Office at 505-346-7828.

Respectfully,

Gregory D. Stover  
Special Agent/Pilot



## ATTACHMENT 8

U.S. Fish &amp; Wildlife Service

United States District Court  
Violation Notice

Loc. Code <b>ABQ</b>		W 581384	
Violation No. W 581384			
Print Officer Name <b>GREG STOVER</b>		Officer No. <b>SA 0281</b>	
YOU ARE CHARGED WITH THE FOLLOWING VIOLATION			
Date and Time of Offense <b>11/03/98</b>	Offense Charged <b>16 U.S.C. 703</b>		
Place of Offense <b>LEA CO, NM, CONTROLLED RECOVERY INC.</b> Offense Description <b>UNLAWFUL TAKE OF (1) MIGRATORY BIRD, MEADOWLARK (STURNELIA SP.)</b> Estimated Time of Day <b>12:15 PM</b>			
Defendant's Last Name <b>CONTROLLED RECOVERY INC.</b>		First Name <b>ML</b>	
Present Address <b>P.O. BOX 388</b>			
City <b>HOBBS</b>		State <b>NM</b>	Zip Code <b>88241</b>
Date of Birth		Social Security Number	
Driver's License No.			
D.L. State			
Vehicle Description			
Vehicle Tag No.	Vehicle Tag State	Year	Vehicle Make
			Vehicle Color
A <input type="checkbox"/> YOU MUST APPEAR IN COURT. SEE INSTRUCTIONS. B <input checked="" type="checkbox"/> YOU MUST MARK ONE OF THE TWO CHOICES BELOW AND MAIL THIS FORM WITHIN 21 DAYS. SEE INSTRUCTIONS. I wish to terminate this matter by paying the collateral shown below, enclosed. I plead not guilty and promise to appear as required.			
YOUR COURT DATE			
Court Address		Date	
		Time	
# Collateral (fine) <b>800.</b>		For payment by credit card, SEE INSTRUCTIONS.	
Physical Description			
Sex	Race	Height	Weight
Hair	Eyes	(Circle One)	
		Adult Juvenile	
Weather Conditions		Clear	Cloudy
		Rain	Snow
Traffic Conditions		Light	Medium
		Heavy	Fog

Submit 4 Copies  
to Appropriate  
District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION

DIVISION

Form C-134  
Aug. 1, 1989

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

AM 10 02

Permit No. H-76  
(For Division Use Only)

APPLICATION FOR EXCEPTION TO DIVISION ORDER R-8952  
FOR PROTECTION OF MIGRATORY BIRDS Rule 8(b), Rule 105(b), Rule 312(h), Rule 313, or Rule 711(I)

Operator Name: Controlled Recovery Inc (CRI)  
Operator Address: P.O. Box 369 Hobbs, NM 88241  
Lease or Facility Name Halfway Location 27 20S 32E  
Size of pit or tank: large Ut. Ltr. Sec. Twp. Rge

Operator requests exception from the requirement to screen, net or cover the pit or tank at the above-described facility.

The pit or tank is not hazardous to migratory waterfowl. Describe completely the reason pit is non-hazardous.

The pit contains only production water.

1) If any oil or hydrocarbons should reach this facility give method and time required for removal:

Within 24 hours, plant employees will remove oil by use of vacuum truck.

2) If any oil or hydrocarbons reach the above-described facility the operator is required to notify the appropriate District Office of the OCD with 24 hours.

Operator proposes the following alternate protective measures: All production water goes

through a tank skimming process then into a 30'x40' safety pit then  
enters open pits which are flagged.

CERTIFICATION BY OPERATOR: I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature Ken Marsh Title President Date July 15, 1991  
Printed Name Ken Marsh Telephone No. (505) 393-1079

FOR OIL CONSERVATION DIVISION USE

Date Facility Inspected \_\_\_\_\_

Inspected by \_\_\_\_\_

Approved by ORIGINAL SIGNED BY JERRY SEXTON  
DISTRICT I SUPERVISOR

Title \_\_\_\_\_

1111 2 A 1004



369-5704

**CRI**  
**CONTROLLED RECOVERY INC.**

P.O. BOX 369, HOBBS NM 88241 (505) 393-1079

April 7, 1997

Mr. Jerry Sexton  
District Supervisor  
State of New Mexico  
Oil Conservation Division  
P.O. Box 1980  
Hobbs, New Mexico 88241

Dear Mr. Sexton,

N.M.O.C.D. Rule 711 Section C.8 provides for an exception to the requirements that tanks, pits and ponds exceeding sixteen feet in diameter be covered, screened or netted.

Controlled Recovery, Inc. is requesting that you issue this exception to CRI's facility located in Section 27 Township 20 South Range 23 east NMPM, Lea County permitted under order R-9166 April 27, 1997.

CRI's facility has night security lights, twenty-four hour truck traffic, is adjacent to US Highway 62-180 and County Road C-29. Machinery on site generates noise and movement. There are two dogs on site at all times. There are four full time employees assigned to facility operations.

In six years of operations there have been no incidents harmful to migratory birds at the facility. CRI's facility has been visited and inspected by U.S. Fish and Wildlife Services. Mr. Nicholas E. Chavez has been at the facility in the past 120 days and reported no problems or concerns. CRI also utilizes flags in some locations.

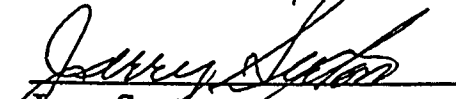
These alternate methods are more than adequate to protect migratory birds and clearly this facility is not hazardous to migratory birds.

Rule 711 provides that the NMOC D District Supervisor may grant the exception, which CRI now requests.

Sincerely,

  
Ken Marsh

The above request is granted this 14 day of April 1997.

  
Jerry Sexton

District Supervisor  
New Mexico Oil Conservation Division

Submit 4 Copies  
to Appropriate  
District Office

State of New Mexico OIL CONSERVATION DIVISION  
Energy, Minerals and Natural Resources Department

Form C-134  
Aug. 1, 1989

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

OIL CONSERVATION DIVISION 01 01 02 PM 10 02

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Permit No. H-76  
(For Division Use Only)

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

APPLICATION FOR EXCEPTION TO DIVISION ORDER R-8952  
FOR PROTECTION OF MIGRATORY BIRDS Rule 8(b), Rule 105(b), Rule 312(h), Rule 313, or Rule 711(I)

Operator Name: Controlled Recovery Inc (CRI)  
Operator Address: P.O. Box 369 Hobbs, NM 88241  
Lease or Facility Name Halfway Location 27 20S 32E  
Size of pit or tank: large Ut. Ltr. Sec. Twp. Rge.

Operator requests exception from the requirement to screen, net or cover the pit or tank at the above-described facility.

The pit or tank is not hazardous to migratory waterfowl. Describe completely the reason pit is non-hazardous.

The pit contains only production water.

- 1) If any oil or hydrocarbons should reach this facility give method and time required for removal:  
Within 24 hours, plant employees will remove oil by use of vacuum truck,

- 2) If any oil or hydrocarbons reach the above-described facility the operator is required to notify the appropriate District Office of the OCD with 24 hours.

Operator proposes the following alternate protective measures: All production water goes  
through a tank skimming process then into a 30'x40' safety pit then  
enters open pits which are flagged.

CERTIFICATION BY OPERATOR: I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature Ken Marsh Title President Date July 15, 1991  
Printed Name Ken Marsh Telephone No. (505) 393-1079

FOR OIL CONSERVATION DIVISION USE

Date Facility Inspected \_\_\_\_\_

Inspected by \_\_\_\_\_

Approved by ORIGINAL SIGNED BY JERRY SEXTON  
DISTRICT I SUPERVISOR

Title \_\_\_\_\_

Date JUL 30 1991



5704  
**CRI**  
**CONTROLLED RECOVERY INC.**

P.O. BOX 369, HOBBS NM 88241 (505) 393-1079

April 7, 1997

Mr. Jerry Sexton  
District Supervisor  
State of New Mexico  
Oil Conservation Division  
P.O. Box 1980  
Hobbs, New Mexico 88241

Dear Mr. Sexton,

N.M.O.C.D. Rule 711 Section C.8 provides for an exception to the requirements that tanks, pits and ponds exceeding sixteen feet in diameter be covered, screened or netted.

Controlled Recovery, Inc. is requesting that you issue this exception to CRI's facility located in Section 27 Township 20 South Range 23 east NMPM, Lea County permitted under order R-9166 April 27, 1997.

CRI's facility has night security lights, twenty-four hour truck traffic, is adjacent to US Highway 62-180 and County Road C-29. Machinery on site generates noise and movement. There are two dogs on site at all times. There are four full time employees assigned to facility operations.

In six years of operations there have been no incidents harmful to migratory birds at the facility. CRI's facility has been visited and inspected by U.S. Fish and Wildlife Services. Mr. Nicholas E. Chavez has been at the facility in the past 120 days and reported no problems or concerns. CRI also utilizes flags in some locations.

These alternate methods are more than adequate to protect migratory birds and clearly this facility is not hazardous to migratory birds.

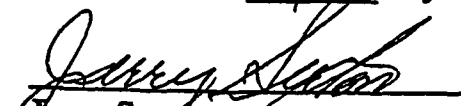
Rule 711 provides that the NMOCD District Supervisor may grant the exception, which CRI now requests.



Sincerely,

  
Ken Marsh

The above request is granted this 14 day of April 1997.

  
Jerry Sexton

District Supervisor

New Mexico Oil Conservation Division



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Division of Law Enforcement  
2415 Princeton Drive NE, Box D  
Albuquerque, New Mexico 87107

ATTACHMENT 7

December 11, 1998

Controlled Recovery Inc.  
P.O. Box 388  
Hobbs, New Mexico 88241

Dear Mr Marsh,

During the inspection of your facility on 11/03/98, USFWS Special Agent Doug McKenna recovered one dead meadowlark (*Sturnella* Sp.) from a pit identified by one of your employees as pond 11. The enclosed Violation Notice W581384 has been issued in accordance with the established collateral schedule guidelines for the Federal District of New Mexico.

The instructions for payment or contesting of this Violation Notice are included on the white colored attachment sheet. Please feel free to contact me if you have any questions regarding this matter at our Albuquerque Field Office at 505-346-7828.

Respectfully,

Gregory D. Stover  
Special Agent/Pilot

## ATTACHMENT 8

U.S. Fish &amp; Wildlife Service

United States District Court  
Violation Notice

Loc. Code <b>ABQ</b>	W 581384
Violation No. <b>W 581384</b>	
Print Officer Name <b>GREG STOVER</b> 505-346-7828 Officer No. <b>SA 0281</b>	

## YOU ARE CHARGED WITH THE FOLLOWING VIOLATION

Date and Time of Offense <b>11/03/98</b>	Offense Charged <b>16 USC 703</b>
Offense Description <b>LEA CO, NM, CONTROLLED RECOVERY INC.</b> <b>UNLAWFUL TAKE OF (1) MIGRATORY BIRD,</b> <b>MEADOWLARK (STURNELLA SP.)</b>	

Defendant's Last Name <b>CONTROLLED RECOVERY INC.</b>	First Name <b>SA</b>	M.I. <b>16</b>
Present Address <b>P.O. BOX 388</b>		
City <b>HOBBS</b>	State <b>NM</b>	Zip Code <b>88241</b>
Driver's License No.	D.L. State	Date of Birth
		Social Security Number

## VEHICLE DESCRIPTION

Vehicle Tag No.	Vehicle Tag State	Year	Vehicle Make	Vehicle Color

- A ☐ YOU MUST APPEAR IN COURT. SEE INSTRUCTIONS.  
 (B) ☒ YOU MUST MARK ONE OF THE TWO CHOICES BELOW AND  
 MAIL THIS FORM WITHIN 21 DAYS. SEE INSTRUCTIONS.  
 \_\_\_\_\_ I wish to terminate this matter by paying the collateral shown below,  
 enclosed.  
 \_\_\_\_\_ I plead not guilty and promise to appear as required.

## YOUR COURT DATE

Court Address	Date
	Time

# Collateral (fine) <b>800.00</b>	For payment by credit card, SEE INSTRUCTIONS.
-----------------------------------	---

## Physical Description

## Original - CVB Copy

Sex	Race	Height	Weight	Hair	Eyes	(Circle One) Adult Juvenile
Weather Conditions:		Clear	Cloudy	Rain	Snow	Ice Fog
Traffic Conditions:		Light	Medium	Heavy		

8/14/00

TO: MARTYNE J. KIELING (505-827-8177)

PAGES: (3)

- On 1/21/99, the CENTRAL VIOLATIONS BUREAU, U.S. DISTRICT COURT, SAN ANTONIO, TEXAS, CONFIRMED THAT CONTROLLED RECOVERY INC., P.O. BOX 388, HOBBS, NM, FORFEITED \$800 COLLATERAL FOR FEDERAL VIOLATION NOTICE W581384.

- HOPE THIS HELPS -

GREG FIDLER  
505-346-7828

Contains 193.608 acres, more or less.  
South 30 feet being reserved as a utility

U.S.A.

TRACT I

U.S. HIGHWAY 62-180

K.R.M.

QUAIL RUN DEV.

16

17

3

4 5 6

9 8 7

180

CRI

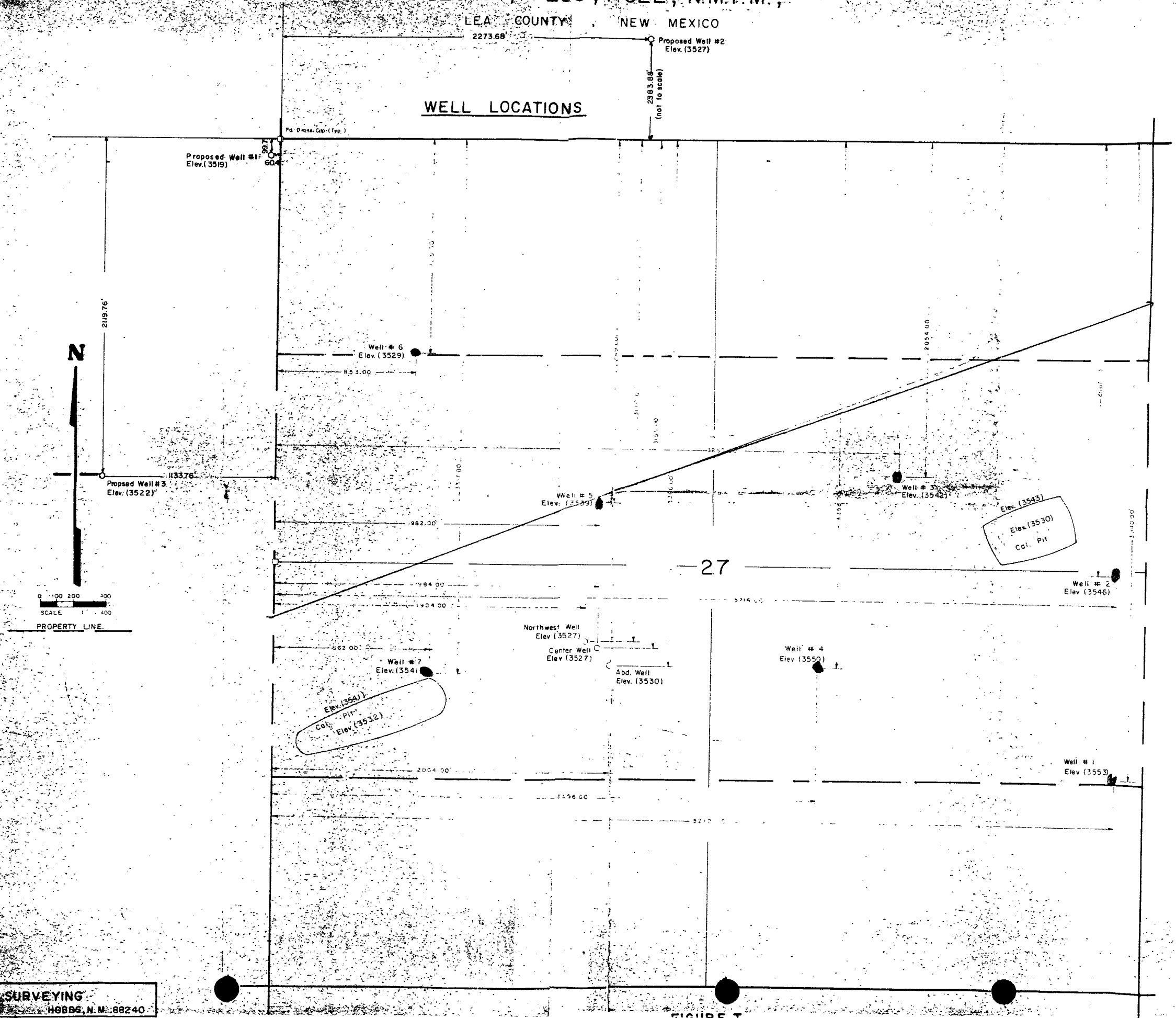
U.S.A.



SEC. 27, T20S, R32E, N.M.P.M.,

LEA COUNTY, NEW MEXICO

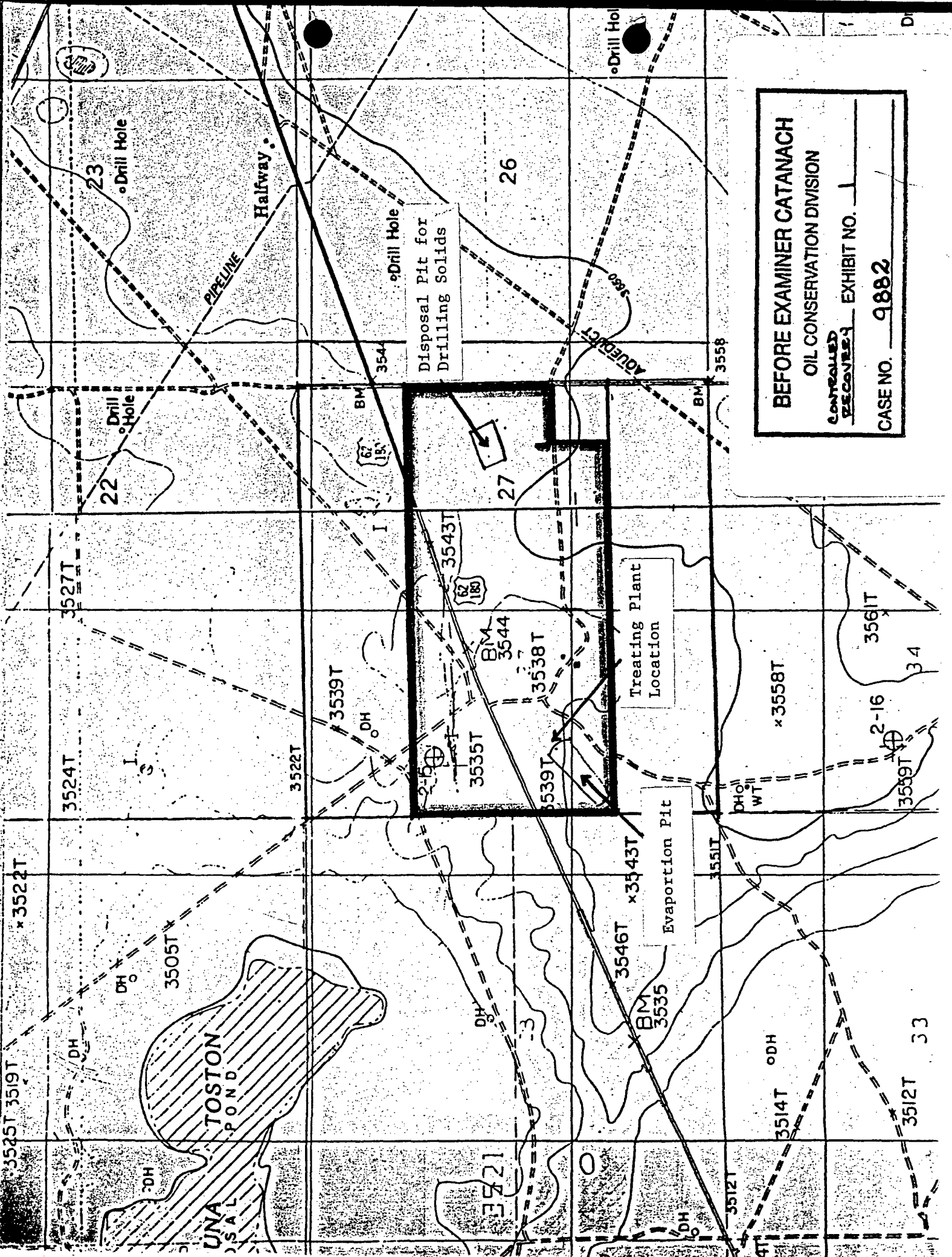
WELL LOCATIONS



KING SURVEYING

HOBBS, N.M. 88240

FIGURE 1



**BEFORE EXAMINER CATANACH**

OIL CONSERVATION DIVISION

CONTROLLED  
RECOVERED EXHIBIT NO. 1

CASE NO. 9882



36-5704

**CRI**  
**CONTROLLED RECOVERY INC.**

P.O. BOX 369, HOBBS NM 88241 (505) 393-1079

April 7, 1997

Mr. Jerry Sexton  
District Supervisor  
State of New Mexico  
Oil Conservation Division  
P.O. Box 1980  
Hobbs, New Mexico 88241

Dear Mr. Sexton,

N.M.O.C.D. Rule 711 Section C.8 provides for an exception to the requirements that tanks, pits and ponds exceeding sixteen feet in diameter be covered, screened or netted.

Controlled Recovery, Inc. is requesting that you issue this exception to CRI's facility located in Section 27 Township 20 South Range 23 east NMPM, Lea County permitted under order R-9166 April 27, 1997.

CRI's facility has night security lights, twenty-four hour truck traffic, is adjacent to US Highway 62-180 and County Road C-29. Machinery on site generates noise and movement. There are two dogs on site at all times. There are four full time employees assigned to facility operations.

In six years of operations there have been no incidents harmful to migratory birds at the facility. CRI's facility has been visited and inspected by U.S. Fish and Wildlife Services. Mr. Nicholas E. Chavez has been at the facility in the past 120 days and reported no problems or concerns. CRI also utilizes flags in some locations.

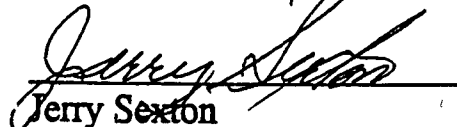
These alternate methods are more than adequate to protect migratory birds and clearly this facility is not hazardous to migratory birds.

Rule 711 provides that the NMOC D District Supervisor may grant the exception, which CRI now requests.

Sincerely,

  
Ken Marsh

The above request is granted this 14 day of April 1997.

  
Jerry Sexton  
District Supervisor  
New Mexico Oil Conservation Division

361-5704

**CRI**  
**CONTROLLED RECOVERY INC.**

P.O. BOX 369, HOBBS NM 88241 (505) 393-1079

April 7, 1997

Mr. Jerry Sexton  
District Supervisor  
State of New Mexico  
Oil Conservation Division  
P.O. Box 1980  
Hobbs, New Mexico 88241

Dear Mr. Sexton,

N.M.O.C.D. Rule 711 Section C.8 provides for an exception to the requirements that tanks, pits and ponds exceeding sixteen feet in diameter be covered, screened or netted.

Controlled Recovery, Inc. is requesting that you issue this exception to CRI's facility located in Section 27 Township 20 South Range 23 east NMPM, Lea County permitted under order R-9166 April 27, 1997.

CRI's facility has night security lights, twenty-four hour truck traffic, is adjacent to US Highway 62-180 and County Road C-29. Machinery on site generates noise and movement. There are two dogs on site at all times. There are four full time employees assigned to facility operations.

In six years of operations there have been no incidents harmful to migratory birds at the facility. CRI's facility has been visited and inspected by U.S. Fish and Wildlife Services. Mr. Nicholas E. Chavez has been at the facility in the past 120 days and reported no problems or concerns. CRI also utilizes flags in some locations.

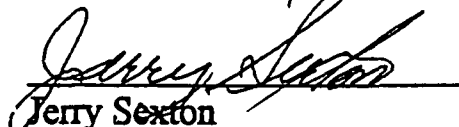
These alternate methods are more than adequate to protect migratory birds and clearly this facility is not hazardous to migratory birds.

Rule 711 provides that the NMOC District Supervisor may grant the exception, which CRI now requests.

Sincerely,

  
Ken Marsh

The above request is granted this 14 day of April 1997.

  
Jerry Sexton  
District Supervisor  
New Mexico Oil Conservation Division

364-5704

**CRI**  
**CONTROLLED RECOVERY INC.**

P.O. BOX 369, HOBBS NM 88241 (505) 393-1079

April 7, 1997

Mr. Jerry Sexton  
District Supervisor  
State of New Mexico  
Oil Conservation Division  
P.O. Box 1980  
Hobbs, New Mexico 88241

Dear Mr. Sexton,

N.M.O.C.D. Rule 711 Section C.8 provides for an exception to the requirements that tanks, pits and ponds exceeding sixteen feet in diameter be covered, screened or netted.

Controlled Recovery, Inc. is requesting that you issue this exception to CRI's facility located in Section 27 Township 20 South Range 23 east NMPM, Lea County permitted under order R-9166 April 27, 1997.

CRI's facility has night security lights, twenty-four hour truck traffic, is adjacent to US Highway 62-180 and County Road C-29. Machinery on site generates noise and movement. There are two dogs on site at all times. There are four full time employees assigned to facility operations.

In six years of operations there have been no incidents harmful to migratory birds at the facility. CRI's facility has been visited and inspected by U.S. Fish and Wildlife Services. Mr. Nicholas E. Chavez has been at the facility in the past 120 days and reported no problems or concerns. CRI also utilizes flags in some locations.

These alternate methods are more than adequate to protect migratory birds and clearly this facility is not hazardous to migratory birds.

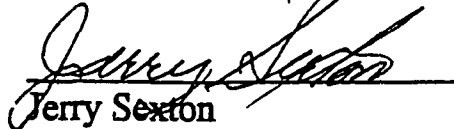
Rule 711 provides that the NMOC D District Supervisor may grant the exception, which CRI now requests.

Sincerely,



Ken Marsh

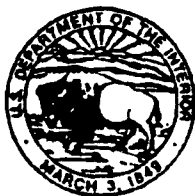
The above request is granted this 14 day of April 1997.



Jerry Sexton

District Supervisor

New Mexico Oil Conservation Division



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Division of Law Enforcement  
2415 Princeton Drive NE, Box D  
Albuquerque, New Mexico 87107

ATTACHMENT 7

December 11, 1998

Controlled Recovery Inc.  
P.O. Box 388  
Hobbs, New Mexico 88241

Dear Mr Marsh,

During the inspection of your facility on 11/03/98, USFWS Special Agent Doug McKenna recovered one dead meadowlark (*Sturnella* Sp.) from a pit identified by one of your employees as pond 11. The enclosed Violation Notice W581384 has been issued in accordance with the established collateral schedule guidelines for the Federal District of New Mexico.

The instructions for payment or contesting of this Violation Notice are included on the white colored attachment sheet. Please feel free to contact me if you have any questions regarding this matter at our Albuquerque Field Office at 505-346-7828.

Respectfully,

Gregory D. Stover  
Special Agent/Pilot

## ATTACHMENT 8

U.S. Fish &amp; Wildlife Service

Loc. Code <b>ABQ</b>	United States District Court Violation Notice	
Violation No. <b>W 581384</b>	Print Officer Name <b>GREG STOVER</b>	<b>W 581384</b>
	Officer No. <b>SA 0281</b>	

YOU ARE CHARGED WITH THE FOLLOWING VIOLATION

Date and Time of Offense <b>11/03/98</b>	Offense Charged <b>16 USC 703</b>
Offense Description <b>LEA CO, NM, CONTROLLED RECOVERY INC.</b>	
<b>UNLAWFUL TAKE OF (1) MIGRATORY BIRD, MEADOWLARK (STURNEIA SP.)</b>	

Defendant's Last Name <b>CONTROLLED RECOVERY INC.</b>	First Name <b>ML</b>
Address <b>P.O. Box 388</b>	
City <b>HOBBS</b>	State <b>NM</b>
Driver's License No.	Zip Code <b>88241</b>
	Date of Birth
	Social Security Number

## VEHICLE DESCRIPTION

Vehicle Tag No.	Vehicle Tag State	Year	Vehicle Make	Vehicle Color
-----------------	-------------------	------	--------------	---------------

- A ☐ YOU MUST APPEAR IN COURT. SEE INSTRUCTIONS.
- (B) X** YOU MUST MARK ONE OF THE TWO CHOICES BELOW AND MAIL THIS FORM WITHIN 21 DAYS. SEE INSTRUCTIONS.
- ☐ I wish to terminate this matter by paying the collateral shown below, enclosed.
- ☐ I plead not guilty and promise to appear as required.

## YOUR COURT DATE

Court Address	Date
	Time

Collateral (fine) <b>\$800.</b>	For payment by credit card, SEE INSTRUCTIONS.
---------------------------------	---

Physical Description						Original - CVB Copy	
Sex	Race	Height	Weight	Hair	Eyes	(Circle One) Adult Juvenile	
Weather Conditions:	Clear	Cloudy	Rain	Snow	Ice	Fog	
Traffic Conditions:	Light	Medium	Heavy				





# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Division of Law Enforcement  
2415 Princeton Drive NE, Box D  
Albuquerque, New Mexico 87107

**ATTACHMENT 7**

December 11, 1998

Controlled Recovery Inc.  
P.O. Box 388  
Hobbs, New Mexico 88241

Dear Mr Marsh,

During the inspection of your facility on 11/03/98, USFWS Special Agent Doug McKenna recovered one dead meadowlark (*Sturnella* Sp.) from a pit identified by one of your employees as pond 11. The enclosed Violation Notice W581384 has been issued in accordance with the established collateral schedule guidelines for the Federal District of New Mexico.

The instructions for payment or contesting of this Violation Notice are included on the white colored attachment sheet. Please feel free to contact me if you have any questions regarding this matter at our Albuquerque Field Office at 505-346-7828.

Respectfully,

Gregory D. Stover  
Special Agent/Pilot

## ATTACHMENT 8

## U.S. Fish &amp; Wildlife Service

United States District Court  
Violation Notice

Loc. Code

ABQ

Violation No.

W 581384

Print Officer Name

GREG STOVER

505-346-7828

Officer No.

SA 0281

W 581384

## YOU ARE CHARGED WITH THE FOLLOWING VIOLATION

Date and Time of Offense

11/03/98

Offense Charged

16 USC 703

Offense Location

LEA CO., NM, CONTROLLED RECOVERY INC.

Offense Description

UNLAWFUL TAKE OF (1) MIGRATORY BIRD,  
MEADOWLARK (STURNELLA SP.)

Defendant's Last Name

CONTROLLED RECOVERY INC.

Defendant's Address

P.O. BOX 388

City

HOBBS

State

NM 88241

Date of Birth

Driver's License No.

D.L. State

Social Security Number

## VEHICLE DESCRIPTION

Vehicle Tag No.

Vehicle Tag State

Year

Vehicle Make

Vehicle Color

A ☐ YOU MUST APPEAR IN COURT. SEE INSTRUCTIONS.B ☒ YOU MUST MARK ONE OF THE TWO CHOICES BELOW AND  
MAIL THIS FORM WITHIN 21 DAYS. SEE INSTRUCTIONS.I wish to terminate this matter by paying the collateral shown below,  
enclosed.

I plead not guilty and promise to appear as required.

## YOUR COURT DATE

Court Address

Date

Time

Collateral (fine)

800.

For payment by credit card, SEE INSTRUCTIONS.

## Physical Description

## Original - CVB Copy

Sex	Race	Height	Weight	Hair	Eyes
-----	------	--------	--------	------	------

(Circle One)

Adult Juvenile

Weather Conditions:

Clear

Cloudy

Rain

Snow

Ice

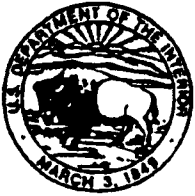
Fog

Traffic Conditions:

Light

Medium

Heavy



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Division of Law Enforcement  
2415 Princeton Drive NE, Box D  
Albuquerque, New Mexico 87107

**ATTACHMENT 7**

December 11, 1998

Controlled Recovery Inc.  
P.O. Box 388  
Hobbs, New Mexico 88241

Dear Mr Marsh,

During the inspection of your facility on 11/03/98, USFWS Special Agent Doug McKenna recovered one dead meadowlark (*Sturnella* Sp.) from a pit identified by one of your employees as pond 11. The enclosed Violation Notice W581384 has been issued in accordance with the established collateral schedule guidelines for the Federal District of New Mexico.

The instructions for payment or contesting of this Violation Notice are included on the white colored attachment sheet. Please feel free to contact me if you have any questions regarding this matter at our Albuquerque Field Office at 505-346-7828.

Respectfully,

Gregory D. Stover  
Special Agent/Pilot

## ATTACHMENT 8

U.S. Fish &amp; Wildlife Service

United States District Court  
Violation Notice

Loc. Code

ABQ

Violation No.

W 581384

Print Officer Name

GREG STOVER

505-346-7828

Officer No.

SA 0281

W 581384

## YOU ARE CHARGED WITH THE FOLLOWING VIOLATION

Date and Time of Offense

11/03/98

Offense Charged

16 USC 703

Perpetrator

LEA CO. NM. CONTROLLED RECOVERY INC.

Offense Description

UNLAWFUL TAKE OF (1) MIGRATORY BIRD,  
MEADOWLARK (STURNELLA SP.)

Perpetrator's Last Name

CONTROLLED RECOVERY INC.

Perpetrator's Address

P.O. BOX 388

City

HOBBES

State

NM

Zip Code

88241

Date of Birth

Driver's License No.

D.L. State

Social Security Number

## VEHICLE DESCRIPTION

Vehicle Tag No.

Vehicle Tag State

Year

Vehicle Make

Vehicle Color

A ☐ YOU MUST APPEAR IN COURT. SEE INSTRUCTIONS.B ☒ YOU MUST MARK ONE OF THE TWO CHOICES BELOW AND  
MAIL THIS FORM WITHIN 21 DAYS. SEE INSTRUCTIONS.I wish to terminate this matter by paying the collateral shown below,  
enclosed.

I plead not guilty and promise to appear as required.

## YOUR COURT DATE

Court Address

Date

Time

Collateral (fine)

800.

For payment by credit card, SEE INSTRUCTIONS.

Physical Description

Original - CVB Copy

Sex	Race	Height	Weight	Hair	Eyes
-----	------	--------	--------	------	------

(Circle One)

Adult Juvenile

Weather Conditions:

Clear

Cloudy

Rain

Snow

Ice

Fog

Traffic Conditions:

Light

Medium

Heavy

Submit 4 Copies  
to Appropriate  
District Office

State of New Mexico OIL CONSERVATION DIVISION  
Energy, Minerals and Natural Resources Department

Form C-134  
Aug. 1, 1989

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

OIL CONSERVATION DIVISION

AM 10 02

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Permit No. H-76

(For Division Use Only)

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

APPLICATION FOR EXCEPTION TO DIVISION ORDER R-8952  
FOR PROTECTION OF MIGRATORY BIRDS Rule 8(b), Rule 105(b), Rule 312(h), Rule 313, or Rule 711(I)

Operator Name: Controlled Recovery Inc (CRI)

Operator Address: P.O. Box 369 Hobbs, NM 88241

Lease or Facility Name Halfway Location 27 20S 32E  
Size of pit or tank: large Ut. Ltr. Sec. Twp. Rge

Operator requests exception from the requirement to screen, net or cover the pit or tank at the above-described facility.

The pit or tank is not hazardous to migratory waterfowl. Describe completely the reason pit is non-hazardous.

The pit contains only production water.

1) If any oil or hydrocarbons should reach this facility give method and time required for removal:

Within 24 hours, plant employees will remove oil by use of vacuum truck.

2) If any oil or hydrocarbons reach the above-described facility the operator is required to notify the appropriate District Office of the OCD with 24 hours.

Operator proposes the following alternate protective measures: All production water goes

through a tank skimming process then into a 30'x40' safety pit then

enters open pits which are flagged.

CERTIFICATION BY OPERATOR: I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature Ken Marsh Title President Date July 15, 1991

Printed Name Ken Marsh Telephone No. (505) 393-1079

FOR OIL CONSERVATION DIVISION USE

Date Facility Inspected \_\_\_\_\_

Inspected by \_\_\_\_\_

Approved by ORIGINAL SIGNED BY JERRY SEXTON  
DISTRICT I SUPERVISOR

Title \_\_\_\_\_

Date \_\_\_\_\_

JUL 30 1991



Submit 4 Copies  
to Appropriate  
District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION

IN DIVISION

Form C-134  
Aug. 1, 1989

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

AM 10 02

Permit No. H-76  
(For Division Use Only)

APPLICATION FOR EXCEPTION TO DIVISION ORDER R-8952  
FOR PROTECTION OF MIGRATORY BIRDS Rule 8(b), Rule 105(b), Rule 312(h), Rule 313, or Rule 711(I)

Operator Name: Controlled Recovery Inc (CRI)

Operator Address: P.O. Box 369 Hobbs, NM 88241

Lease or Facility Name Halfway Location 27 20S 32E  
Ut. Ltr. Sec. Twp. Rge

Size of pit or tank: large

Operator requests exception from the requirement to screen, net or cover the pit or tank at the above-described facility.

       The pit or tank is not hazardous to migratory waterfowl. Describe completely the reason pit is non-hazardous.

The pit contains only production water.

- 1) If any oil or hydrocarbons should reach this facility give method and time required for removal:  
Within 24 hours, plant employees will remove oil by use of vacuum truck.

- 2) If any oil or hydrocarbons reach the above-described facility the operator is required to notify the appropriate District Office of the OCD with 24 hours.

       Operator proposes the following alternate protective measures: All production water goes  
through a tank skimming process then into a 30'x40' safety pit then  
enters open pits which are flagged.

CERTIFICATION BY OPERATOR: I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature Ken Marsh Title President Date July 15, 1991  
Printed Name Ken Marsh Telephone No. (505) 393-1079

FOR OIL CONSERVATION DIVISION USE

Date Facility Inspected                     

Inspected by                     

Approved by ORIGINAL SIGNED BY JERRY SEXTON  
DISTRICT I SUPERVISOR

Title                     

Date JUL 30 1991





Submit 4 Copies  
to Appropriate  
District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-134  
Aug. 1, 1989

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

AM 10 02

Permit No. H-76  
(For Division Use Only)

APPLICATION FOR EXCEPTION TO DIVISION ORDER R-8952  
FOR PROTECTION OF MIGRATORY BIRDS Rule 8(b), Rule 105(b), Rule 312(h), Rule 313, or Rule 711(I)

Operator Name: Controlled Recovery Inc (CRI)

Operator Address: P.O. Box 369 Hobbs, NM 88241

Lease or Facility Name Halfway Location 27 20S 32E  
Ut. Ltr. Sec. Twp. Rge

Size of pit or tank: large

Operator requests exception from the requirement to screen, net or cover the pit or tank at the above-described facility.

The pit or tank is not hazardous to migratory waterfowl. Describe completely the reason pit is non-hazardous.

The pit contains only production water.

1) If any oil or hydrocarbons should reach this facility give method and time required for removal:

Within 24 hours, plant employees will remove oil by use of vacuum truck.

2) If any oil or hydrocarbons reach the above-described facility the operator is required to notify the appropriate District Office of the OCD with 24 hours.

Operator proposes the following alternate protective measures: All production water goes

through a tank skimming process then into a 30'x40' safety pit then

enters open pits which are flagged.

CERTIFICATION BY OPERATOR: I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature Ken Marsh Title President Date July 15, 1991

Printed Name Ken Marsh Telephone No. (505) 393-1079

FOR OIL CONSERVATION DIVISION USE

Date Facility Inspected \_\_\_\_\_

Inspected by \_\_\_\_\_

Approved by ORIGINAL SIGNED BY JERRY SEXTON  
DISTRICT SUPERVISOR

Title \_\_\_\_\_

Date JUL 30 1991



## 25.0 Hydrogen Sulfide Safety (H<sub>2</sub>S)

25.1 Hydrogen Sulfide (H<sub>2</sub>S) is a highly toxic and colorless gas. In concentrations as low as 1000 ppm, or 1/10 of 1%, it can cause unconsciousness, breathing to stop, and death in a few minutes. Even low concentrations can affect the eyes and the respiratory system.

25.1.1 When the amount of H<sub>2</sub>S gas absorbed into the blood system exceeds that which the blood system can oxygenize, systemic poisoning occurs, creating an effect on the central nervous system. Labored respiration occurs shortly and respiratory paralysis will follow immediately at concentrations of 700 ppm and above. Death will occur by asphyxiation unless the exposed person is removed immediately to fresh air and breathing is stimulated by artificial resuscitation.

25.2 There are many hazards associated with H<sub>2</sub>S. In addition to asphyxiation, exposures to H<sub>2</sub>S may result in eye disorders, heart disorders, and nerve disorders.

25.2.1 Symptoms of low level exposure may include one or more of the following, increasing with length of exposure:

25.2.1.1 Fatigue.

25.2.1.2 Irritation to Eyes.

25.2.1.3 Headache.

25.2.1.4 Dizziness.

25.2.1.5 Excitement.

25.2.1.6 Coughing.

25.2.1.7 Drowsiness.

25.2.1.8 Nausea.

25.2.1.9 Sensation of pain in nose, throat, and chest.

25.2.2 Another characteristic of H<sub>2</sub>S is its offensive odor of rotten eggs. However, H<sub>2</sub>S rapidly deadens your sense of smell, so odor is a very unreliable means of detection. Due to its rapid effects, H<sub>2</sub>S is considered one of the most dangerous industrial gases.

- 25.3         $H_2S$  is found in a variety of industries. However, CRI is concerned foremost with operations associated with services provided for the oil & gas industry.  $H_2S$  gas may be found in many facets of production, including but not limited to, well heads, storage tanks, pipelines, treating equipment, and even low lying areas such as pits or cellars.
- 25.4        The characteristic properties of  $H_2S$  are:
- 25.4.1      Odor. Very offensive, commonly referred to as the odor of rotten eggs.
- 25.4.2      Color.  $H_2S$  is colorless.
- 25.4.3      Flammability.  $H_2S$  is highly flammable and burns with a blue flame.
- 25.4.4      Explosive Limits. 4.3% to 46% by volume in air.  $H_2S$  forms explosive mixtures with oxygen.
- 25.4.5      Vapor Density is 1.189 (air = 1).  $H_2S$  is heavier than air and will settle in low lying areas unless disbursed.
- 25.4.6      Solubility.  $H_2S$  is water soluble.
- 25.4.7      Corrosive.  $H_2S$  is highly corrosive to certain metals.
- 25.4.8      Ignition Temperature. 500 degrees F.
- 25.4.9      Boiling Temperature. 76 degrees F.
- 25.4.10     When burned,  $H_2S$  burns with a blue flame and produces another poisonous gas, Sulfur dioxide ( $SO_2$ ). Sulfur dioxide is toxic, very irritating to eyes and lungs, and can also cause serious injury or death.
- 25.5        The effects of  $H_2S$  depend on the following factors:
- Duration: The length of time an individual is exposed.
- Frequency: How often an individual has been exposed.
- Intensity: The dosage or concentration of exposure.
- Individual Susceptibility: The individual's physiological make-up.

25.5.1 Symptoms of H<sub>2</sub>S exposure vary considerably due to an individual's physiological make-up. Studies indicate that some people are more susceptible than others to exposure at the same levels of exposure. Factors that may effect susceptibility are but not limited to the following: previous exposure, some types of health problems, alcoholism or psychiatric problems. Some individuals' previous exposure may increase their susceptibility rather than build up a tolerance to H<sub>2</sub>S. Health problems reducing tolerance might be such problems as a perforated ear drum, emphysema, angina pectoris, myocardial infarction of progressive or severe hypertension, diabetes, Grand Mal epilepsy, eye infections, or anemia. A perforated ear drum would allow air passage into the respiratory tract through the Eustachian tube. Alcoholics and individuals who have consumed alcohol within 24 hours of exposure and persons having psychiatric problems are at risk at any level of H<sub>2</sub>S exposure.

25.5.1.1 The following table indicates normal effects on humans at specified concentration levels. Persons with the above mentioned factors may be more quickly or more intensely affected by exposure to levels as listed.

Amount of H <sub>2</sub> S	Effect
10 ppm	Unpleasant odor, safe for eight hour exposures.
100 ppm	Kills sense of smell in three to five minutes. May cause eyes and throat to sting.
200 ppm	Kills sense of smell rapidly. Stings eyes and throat.
500 ppm	Dizziness, loss of reasoning ability, breathing paralyzed within 30 minutes,
	artificial respiration required at once.
1000 ppm	Unconsciousness at once, followed by death within minutes

25.6 Areas where H<sub>2</sub>S may be present or suspected shall be periodically tested to determine employee exposure to H<sub>2</sub>S. Testing should be repeated when a change occurs that could have an effect on H<sub>2</sub>S concentrations.

25.6.1 No CRI employee shall enter an area where H<sub>2</sub>S levels are or may reasonably be expected to be greater than 10 ppm by volume in air, without satisfying the requirements established in this section and approval from management.

25.7 Training shall be provided for each employee required to work in environments that may be or suspected to be an H<sub>2</sub>S containing environment. Training will be given prior to assignment and shall consist of the following:

25.7.1 Hazards and characteristics of both H<sub>2</sub>S and SO<sub>2</sub>.

25.7.2 Toxicity and properties of H<sub>2</sub>S and SO<sub>2</sub>.

- 25.7.3 H<sub>2</sub>S detection devices and their use.
- 25.7.4 Respiratory Protection. Its use and limitations.
- 25.7.5 Exposure levels and symptoms of exposure.
- 25.7.6 First Aid and equipment of rescue.
- 25.7.7 The "Buddy System" and emergency procedures including rescue and evacuation procedures.
- 25.7.8 H<sub>2</sub>S alarms and contingency plans.
- 25.7.9 Site specific planning development
- 25.7.10 Training shall be documented and maintained for permanent record.
- 25.7.11 Refresher courses shall be conducted annually.
- 25.8 Protective breathing equipment (respirators) are required in an environment exceeding 10 ppm H<sub>2</sub>S content. Two common types suitable for use in H<sub>2</sub>S environments are the self contained breathing apparatus (SCBA) and supplied air or airline respirator.
- 25.8.1 Personnel required to use respirator protection devices shall be examined by a physician to determine the individual's physical ability to perform work while wearing a respirator. (See Respirator Program Section 8 of this manual.)
- 25.8.2 Respirators require a "facial seal" to be effective. The following is a list of items that could prevent a respirator mask from sealing.
  - 25.8.2.1 Beard or long facial hair.
  - 25.8.2.2 Long or bushy sideburns.
  - 25.8.2.3 Hair down on forehead.
  - 25.8.2.4 Eyeglass temples protruding past seal on mask.
  - 25.8.2.5 Facial scars.
  - 25.8.2.6 See Respirator Program Section 8 of this manual for additional information and fit testing instructions.

- 25.9 Detection devices and alarms are essential instrumentation for H<sub>2</sub>S operations. There are a variety of detection devices available for use. However, two main types are commonly used, mechanical detectors and electronic detectors.
- 25.9.1 Testing shall be performed in areas designated as H<sub>2</sub>S areas or areas suspected to contain H<sub>2</sub>S and incoming tank tracks prior to the acceptance of each load. Air supplied full-face or self-contained breathing apparatus may be required for respiratory protection when performing testing as determined by management.
- 25.9.2 Anytime a situation requires the use of a hand held detection device. Respiratory protection must be available for immediate use if needed.
- 25.9.3 Detection alarm systems are installed on many permanent sites where a continuous possibility of encountering H<sub>2</sub>S is possible. These electronic detection units continuously monitor the area in which the sensor heads are located, whether stationary or portable. It is important to find out what the alarms and settings are for each permanent system. Regardless of the cause of the alarm, you should treat every alarm as real until proven otherwise.
- 25.10 Wind direction consciousness is important at all times. Because H<sub>2</sub>S is heavier than air, you should remain upwind from a source of H<sub>2</sub>S. In the event of an alarm, you should move upwind, or crosswind away from the source and uphill if possible. Unless dispersed, H<sub>2</sub>S will remain concentrated, so you must avoid low lying areas.
- 25.10.1 You should be familiar with wind socks and wind direction indicator locations and use them to maintain an upwind position.
- 25.11 Briefing areas and escape routes should be set up according to wind direction. a minimum of two briefing areas are required at least 250 feet away from well heads. At least one briefing area should be upwind at all times. Briefing areas shall have a sign prominently displayed and visible from anywhere on the site. Briefing areas are numbered and are to be used as refill stations for SCBAs. All personnel shall go to the briefing area upwind, as indicated by wind direction devices, in the event of an alarm.
- 25.12 Condition signs are commonly used to communicate the current conditions at most well sites containing H<sub>2</sub>S. They will generally be colored flags displayed on a large sign and consist of three different colors to indicate the condition stage.
- |          |             |   |
|----------|-------------|---|
| Stage #1 | Green Flag  | Normal Conditions.  |
| Stage #2 | Yellow Flag | There is a possibility of encountering H <sub>2</sub> S or it has already been encountered in small quantities (1 ppm to 20 ppm). |

Stage #3

Red Flag

Extreme Danger. Special operations are being done or there is a real possibility of encountering H<sub>2</sub>S in harmful quantities (over 20 ppm).

- 25.12.1 Do not approach an H<sub>2</sub>S location without proper authorization and a breathing apparatus while the red flag is displayed.
- 25.13 Escape and rescue should be the first consideration when arriving on a H<sub>2</sub>S site. You should first note the location of windsocks, H<sub>2</sub>S alarms, briefing areas, and escape routes. In addition, check in with the safety supervisor or proper company representative and be assigned a "buddy".
  - 25.13.1 The procedures to be followed during your activity on location are:
    - 25.13.1.1 Always know where your "buddy" is and make certain he knows where you are.
    - 25.13.1.2 Always have your assigned breathing apparatus readily accessible and ready for use.
    - 25.13.1.3 Should alarms sound, don breathing apparatus and go immediately to the "safe" upwind briefing area.
    - 25.13.1.4 Stay constantly aware of wind direction.
    - 25.13.1.5 Before you attempt to assist someone else, make positively sure that you are adequately protected yourself.
    - 25.13.1.6 Should a rescue be required, you should attempt to drag the victim by grabbing his shirt collar and supporting the head. If clothing is unsuitable as a handhold, the victims arms may be stretch above the head, crossing the wrists, and use the arms to drag the victim. Be certain to support the victim's head.
      - 25.13.1.6.1 Rescue by lifeline is another method were several people from a clear area can pull the victim out while a person wearing SCBA equipment supports the victim's head.
- 25.14 Contingency planning should be performed and available to all personnel. Some items covered in contingency plans are listed below:
  - 25.14.1 General Information and Physiological response to H<sub>2</sub>S and SO<sub>2</sub> exposure.
  - 25.14.2 Safety Procedures, Equipment, Training and Smoking Rules.
  - 25.14.3 Procedures for operating conditions.



- 25.14.3.1 Normal operations
- 25.14.3.2 Potential Danger.
- 25.14.3.3 Extreme Danger
- 25.14.4 The responsibility of personnel for each operating condition.
- 25.14.5 Designation of "Safe" briefing areas.
- 25.14.6 Designation of escape routes.
- 25.14.7 Evacuation plan including alarm system explanation.
- 25.14.8 Agencies to be notified in the event of an emergency. Includes definitions of emergencies at varying degrees.
- 25.14.9 A list of all residents, their location and phone numbers within a two mile radius of exposure.
- 25.14.10 A layout of rig, location and its proximity to local maps and topography sketch.
- 25.15 All personnel should read and become familiar with the contingency plan and be prepared to follow its procedures during an actual release of  $H_2S$ .
- 25.16 Each individual assigned to work in a  $H_2S$  area, as a portion of this necessary training should be trained in first aid and CPR. Each individual should review first aid and CPR guidelines and procedures at the start of each operation.

Oil Conservation Division  
2040 South Pacheco  
Santa Fe, NM 87505

**AUTHORIZATION TO MOVE PRODUCED WATER**

Transporter Name Controlled Recovery, Inc.

Address

Office Location (If different)

Carlsbad Highway

P.O. Box 388

Hobbs, N.M.

Hobbs, N.M. 88241

Phone Numbers(s) (505) 393-1079

State Corporation Commission Permit No. 1466515

NOTE: It is the responsibility of each holder of an approved Form C-133 to familiarize its personnel with the content of Division Rules 709 and 710 and to assure operations in compliance therewith. Failure to move and dispose of produced water in accordance with Division Rules 709 and 710 are cause for cancellation of Form C-133 and the authority to move produced water.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signature Ken Marsh

Date 08-15-00

Printer Name Ken Marsh

Title President

(This space for State Use)

Approved by Roger Chandler

Title Energy Bureau Chief

Date 8/21/00



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING  
GOVERNOR

August 6, 1991

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

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-756-666-892**

Mr. Ken Marsh, President  
Controlled Recovery, Inc.  
P. O. Box 369  
Hobbs, New Mexico 88241

RE: Permit Modification  
Controlled Recovery Disposal Facility  
Lea County, New Mexico

Dear Mr. Marsh:

The Oil Conservation Division (OCD) has received your requests dated July 16, 1991, for permit modifications for the above referenced facility. The modifications consist of the addition of a second safety, skimming and observation pond in series with the existing pond and the enlargement of the solids disposal pits.

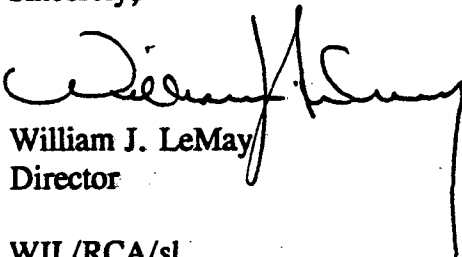
Pursuant to OCD Rule 711 and based on the information provided in your requests, the proposed modifications are hereby approved.

The modifications are considered minor modifications, therefore, the issuance of public notice is not required.

Please be aware that this approval does not relieve you of liability should your operation result in actual pollution of surface or ground waters or the environment actionable under other laws and/or regulations.

If you have any questions, please do not hesitate to call Roger Anderson at (505) 827-5884.

Sincerely,



William J. LeMay  
Director

WJL/RCA/sl

cc: , OCD Hobbs Office

**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. (Extra charge) 2. ☐ Restricted Delivery. (Extra charge)

<p>3. Article Addressed to:</p> <p><i>Ken Marsh</i> <i>Controlled Recovery, Inc.</i> <i>P.O. Box 369</i> <i>Moores, NM 88241</i></p>	<p>4. Article Number <i>P756666892</i></p> <p>Type of Service:</p> <p><input type="checkbox"/> Registered <input type="checkbox"/> Insured  <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD  <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise</p> <p>Always obtain signature of addressee or agent and DATE DELIVERED</p>
<p>5. Signature — Address</p> <p><i>X</i></p>	<p>6. Addressee's Address (ONLY if requested and fee paid)</p>
<p>6. Signature — Agent</p> <p><i>X</i></p>	<p>7. Date of Delivery</p> <p><i>8-8-91</i></p>

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

GARREY CARRUTHERS  
GOVERNOR

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

September 13, 1990

CERTIFIED MAIL  
RETURN RECEIPT NO. P-918-402-355

Mr. Ken Marsh, President  
Controlled Recovery, Inc.  
P. O. Box 369  
Hobbs, New Mexico 88241

RE: Landfarm Operation  
Controlled Recovery Disposal Facility  
Lea County, New Mexico

Dear Mr. Marsh:

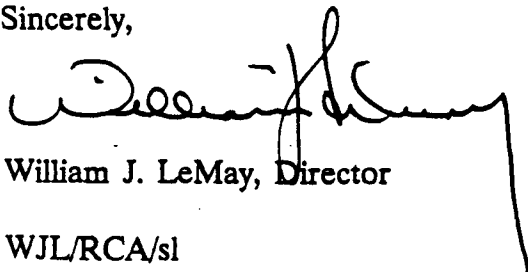
The Oil Conservation Division (OCD) has reviewed your application for operation of an oilfield waste landfarm at your previously approved disposal facility located in Section 27, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico.

Pursuant to OCD Rule 711 the landfarm operation is hereby approved. The landfarm will be constructed and operated pursuant to the terms and conditions contained in your application dated August 2, 1990 and in your information dated September 12, 1990 submitted as a supplement to the application.

Please be advised approval of this landfarm does not relieve you of liability should your operation result in actual pollution of surface or ground water or the environment actionable under other laws and/or regulations.

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

Sincerely,



William J. LeMay, Director

WJL/RCA/sl

cc: OCD Hobbs Office

**SENDER:** Complete items 1 and 2 when additional services are desired; and complete 3 and 4.  
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. (Extra charge) 2. ☐ Restricted Delivery (Extra charge)

3. Article Addressed to:  
*Controlled Recovery, Inc.*  
*P.O. Box 369*  
*Hobbs, N.M. 88241*  
*attn: Ken Marsh* (Se)

4. Article Number:  
*P918402355*

Type of Service:  
☐ Registered ☐ Insured  
☒ Certified ☐ COD  
☐ Express Mail ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED

5. Signature — Addressee:  
X

6. Signature — Agent:  
X *Marly Carn*

7. Date of Delivery:

8. Addressee's Address (ONLY if requested and fee paid):

PS Form 3811, Mar. 1988 \* U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

**SENDER:** Complete items 1 and 2 when additional services are desired; and complete 3 and 4.  
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. (Extra charge) 2. ☐ Restricted Delivery (Extra charge)

3. Article Addressed to:  
*Controlled Recovery*  
*Box 369*  
*HOBBS, N.M. 88240*

4. Article Number:  
*P918402355*

Type of Service:  
☐ Registered ☐ Insured  
☒ Certified ☐ COD  
☐ Express Mail ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED

5. Signature — Addressee:  
X *Norma Bettes*

6. Signature — Agent:  
X

7. Date of Delivery:

8. Addressee's Address (ONLY if requested and fee paid):

PS Form 3811, Apr. 1989 \* U.S.G.P.O. 1989-234-615 DOMESTIC RETURN RECEIPT

CAMPBELL, CARR, BERGE  
& SHERIDAN, P.A.  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN  
MICHAEL H. FELDEWERT  
TANYA M. TRUJILLO  
JACK M. CAMPBELL  
1916-1999

OIL CONSERVATION DIV.

00 JUL 19 PM 1:35

JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
FACSIMILE: (505) 983-6043  
E-MAIL: law@westofpecos.com

July 19, 2000

HAND-DELIVERED

Lori Wrotenbery, Director  
Oil Conservation Division  
New Mexico Department of Energy, Minerals and Natural Resources  
2040 South Pacheco Street  
Santa Fe, NM 87505

Re: Controlled Recovery Inc. - Rule 711 Permit

Dear Ms. Wrotenbery:

CRI has reviewed your July 3, 2000, letter which purports to approve a "new permit" for CRI's facility in Lea County, New Mexico. CRI informs us that it has not requested a new permit, that it has been permitted under Order R-9166 since 1990, and that it is permitted for land farming under the attached "Exhibit E." CRI further informs us that it is in compliance with both the Order and Rule 711. We are therefore perplexed by the OCD's attempt to issue a "new permit."

CRI has been and will continue to be responsive to OCD requests and other measures designed to protect the public health and environment. CRI would therefore like to meet with you to discuss your July 3<sup>rd</sup> letter and what we view as proposed additions to Order R-9166. However, CRI does not agree with all of the proposed additions and would like to visit with you and your staff to determine the reasons for - and to air CRI's concerns about - each of the proposed additions. Our office will call shortly to schedule a meeting with you and your staff.

Thank you for your consideration of this matter and we look forward to meeting with you and your staff.

Sincerely,



Michael H. Feldewert

MHF/ras  
Enclosure

cc: Ken Marsh, Controlled Recovery, Inc.  
Martyne Kieling (w/ enc.)



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

EXHIBIT "E"

GARREY CARRUTHERS  
GOVERNOR

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

September 13, 1990

CERTIFIED MAIL  
RETURN RECEIPT NO. P-918-402-355

Mr. Ken Marsh, President  
Controlled Recovery, Inc.  
P. O. Box 369  
Hobbs, New Mexico 88241

RE: Landfarm Operation  
Controlled Recovery Disposal Facility  
Lea County, New Mexico

Dear Mr. Marsh:

The Oil Conservation Division (OCD) has reviewed your application for operation of an oilfield waste landfarm at your previously approved disposal facility located in Section 27, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico.

Pursuant to OCD Rule 711 the landfarm operation is hereby approved. The landfarm will be constructed and operated pursuant to the terms and conditions contained in your application dated August 2, 1990 and in your information dated September 12, 1990 submitted as a supplement to the application.

Please be advised approval of this landfarm does not relieve you of liability should your operation result in actual pollution of surface or ground water or the environment actionable under other laws and/or regulations.

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

Sincerely,

William J. LeMay, Director

WJL/RCA/sl

cc: OCD Hobbs Office



8/14/00

TO: MARTYNE J. KIELING (505-827-8177)

PAGES: (3)

- On 1/21/99, the CENTRAL VIOLATIONS BUREAU, U.S. DISTRICT COURT, SAN ANTONIO, TEXAS, CONFIRMED THAT CONTROLLED RECOVERY INC., P.O. BOX 388, HOBBS, NM, forfeited \$800 COLLATERAL FOR FEDERAL VIOLATION NOTICE W581384.
- HOPE THIS HELPS -

Greg FROVER  
505-346-7828



## United States Department of the Interior

ATTACHMENT 7

## FISH AND WILDLIFE SERVICE

Division of Law Enforcement  
2415 Princeton Drive NE, Box D  
Albuquerque, New Mexico 87107

December 11, 1998

Controlled Recovery Inc.  
P.O. Box 388  
Hobbs, New Mexico 88241

Dear Mr Marsh,

During the inspection of your facility on 11/03/98, USFWS Special Agent Doug McKenna recovered one dead meadowlark (*Sturnella* Sp.) from a pit identified by one of your employees as pond 11. The enclosed Violation Notice W581384 has been issued in accordance with the established collateral schedule guidelines for the Federal District of New Mexico.

The instructions for payment or contesting of this Violation Notice are included on the white colored attachment sheet. Please feel free to contact me if you have any questions regarding this matter at our Albuquerque Field Office at 505-346-7828.

Respectfully,

Gregory D. Stover  
Special Agent/Pilot

## ATTACHMENT 8

## U.S. Fish &amp; Wildlife Service

United States District Court  
Violation Notice

Loc. Code <b>ABQ</b>	Violation No. <b>W 581384</b>		Print Officer Name <b>GREG STOVER</b>		<b>W 581384</b>
			Officer No. <b>SA 0281</b>		
YOU ARE CHARGED WITH THE FOLLOWING VIOLATION					
Date and Time of Offense <b>11/03/98</b>		Offense Charged <b>16 USC 703</b>			
Offense Description <b>LEA CO, NM, CONTROLLED RECOVERY INC. UNLAWFUL TAKE OF (1) MIGRATORY BIRD, MEADOWLARK (STURNELIA SP.)</b>					
Defendant's Last Name <b>CONTROLLED RECOVERY INC.</b>		First Name <b>DAVID</b>		M.I. <b>DAVID</b>	
Street Address <b>P.O. BOX 388</b>					
City <b>HOBBS</b>		State <b>NM</b>	Zip Code <b>88241</b>	Date of Birth	
Driver's License No.		D.L. State	Social Security Number		

## VEHICLE DESCRIPTION

Vehicle Tag No.	Vehicle Tag State	Year	Vehicle Make	Vehicle Color

- A ☐ YOU MUST APPEAR IN COURT. SEE INSTRUCTIONS.
- ☒ B YOU MUST MARK ONE OF THE TWO CHOICES BELOW AND MAIL THIS FORM WITHIN 21 DAYS. SEE INSTRUCTIONS.
- ☐ I wish to terminate this matter by paying the collateral shown below, enclosed.
- ☐ I plead not guilty and promise to appear as required.

## YOUR COURT DATE

Court Address	Date
	Time

# Collateral (fine) <b>800.00</b>	For payment by credit card, SEE INSTRUCTIONS.
-----------------------------------	---

Physical Description						Original - CVB Copy	
Sex	Race	Height	Weight	Hair	Eyes	(Circle One) Adult Juvenile	
Weather Conditions:		Clear	Cloudy	Rain	Snow	Ice	Fog
Traffic Conditions:		Light	Medium	Heavy			