



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 27th FIGHTER WING (ACC)  
CANNON AIR FORCE BASE, NEW MEXICO

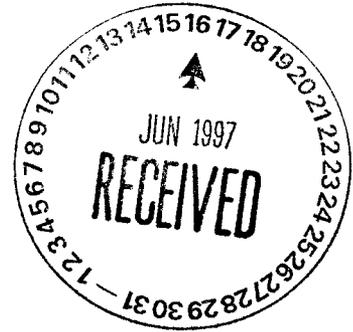
*Stu*

13 JUN 1997

Colonel W. P. Ard  
Commander, 27th Support Group  
110 E Sextant Avenue Suite 1098  
Cannon AFB NM 88103-5323



Mr. Benito J. Garcia, Chief  
Hazardous and Radioactive Materials Bureau  
New Mexico Environment Department  
2044 Galisteo Street  
P O Box 26110  
Santa Fe NM 87502



Dear Mr. Garcia

NMED has requested additional information for actions that took place on Cannon AFB in 1994 when Remediation Services Incorporated excavated the oil water separator and contaminated soil at Solid Waste Management Units 86-90, SD-11.

The state has expressed concern that contaminated soil from the excavation pit was mixed with clean soil to backfill the hole possibly diluting the contaminated soil from hazardous waste levels to acceptable levels. We are sure that the term "mixed" was used only in the broadest sense of the word in that there was no effort made to keep the contaminated soil separated from the clean fill when it went into the hole. This is stated in Appendix A which is a letter directing the contractor to do that.

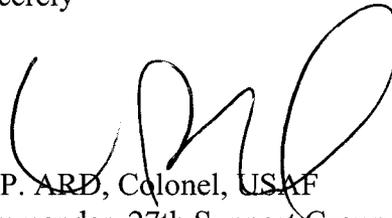
The contaminated soil in question came from slopes cutbacks of the excavation. Corps of Engineers insisted on these cutbacks to prevent the possibility of a cave-in because of the depth of the excavation. This is documented in Appendix E. The analysis of the contaminated soil is presented in Appendix B, C, & D attached to this letter. Appendix F is a memo for record from the Corps of Engineers files which noted that the EPA approved using the slightly contaminated soil for backfill material. This was done and additional clean fill was placed and compacted on top of it to finish filling up the hole as directed in Appendix A.

*HWA CAFB / 7*

Approximately 186.3 tons of more severely contaminated soil was disposed of off base at an approved facility.

We hope this provides a satisfactory explanation. If you have any questions, please contact Mr. Sanford Hutsell at (505) 784-6378 or Mr. John S. Pike at (505) 784-4348.

Sincerely

A handwritten signature in black ink, appearing to read 'W. P. ARD', written in a cursive style.

W. P. ARD, Colonel, USAF  
Commander, 27th Support Group

Attachments:  
Appendixes A-F

cc:  
NMED (C. Will)  
NMED (S. Pullen)  
NMED GW Bureau (J. Jacobs)  
EPA Region VI (D. Neleigh)  
HQ ACC CES/ESUW (M. Patterson)



DEPARTMENT OF THE ARMY  
 ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS  
 CANNON AIR FORCE BASE RESIDENT OFFICE  
 108 ENGINEERS WAY  
 CANNON AIR FORCE BASE, NEW MEXICO 88103-5146  
 PH (505) 784-4350 FAX (505) 784-2663

REPLY TO  
 ATTENTION OF:

August 16, 1994

Construction-Operations Division  
 Cannon AFB Resident Office

Serial Letter No. 03/C-02

SUBJECT: Contract No. DACA45-94-C-0100, Oil/Water Separator  
 Removal, Cannon AFB, New Mexico; Proposed Change Case C-02,  
 "Variation in Estimated Quantities".

Remediation Services Inc.  
 924 NW 60th  
 Oklahoma City, Oklahoma 73118

Gentlemen:

It has been determined that the extent of the contaminated soil extends beyond the excavation limits required by your contract. As a result, no further excavation will be performed. The area will be backfilled in accordance with original paragraphs 3.5.4.4 and 3.7 of Specification Section 02071, with the following direction. EPA and the New Mexico Environmental Division have informed Cannon AFB that the levels of contamination identified by the tested composite soil sample "CS2" are tolerable. Therefore, as I have directed your field crew on August 15, 1994, do not haul off any more of the "contaminated" material. This material will instead be utilized as backfill, and will be the first layers of fill to be placed. After this soil source is exhausted, backfill may continue with the stockpile of "clean" material. The remainder of required fill material shall be select fill in accordance with paragraph 2.1 of Specification Section 02071. Compaction and density requirements for the entire backfill operations shall be in accordance with paragraph 3.7 of Specification Section 02071. As discussed with your foreman, the stockpile containing broken concrete will be disposed of at the Clovis landfill following a letter from the generator to the receiver identifying the contents of the material. Contract modification A00001/C-01 previously executed on August 04, 1994 will be rescinded in its entirety by an upcoming change case identified as Change Case C-02. The upcoming change will also reflect an adjustment to Bid Item Nos. 1 and 2 for the additional excavation, compaction, and removal of contaminated soil.

In accordance with Special Clause 10 - QUANTITY SURVEYS and Specification Section 01550 - MEASUREMENT AND PAYMENT, you are required to conduct original and final surveys to compute the quantities of work performed and the actual construction completed. The final quantities for Bid Item 1 will be determined upon

Enclosure 4

completion and verification of your quantity surveys. The final quantity for Bid Item 2 will be determined by certified weigh bills in accordance with paragraph 2 of Specification Section 01550. As of this date, the certified weigh bills have not been submitted to the Government. It is imperative that the weigh bills and complete manifest be submitted to this office without further delay. Upon determination and verification of the final quantities we will request you to provide a cost proposal for the revised quantities.

I informed your field crew of the above direction on August 15, 1994. Should you have any questions regarding this matter, contact the undersigned or Donny Bass at the Cannon Resident Office.

Sincerely,



Karen Durham-Aguilera, P.E.  
Administrative Contracting Officer



# ANACHEM INC.

8 Prestige Circle, Suite 104 • Allen, Texas 75002  
214/727-9003 • FAX # 214/727-9686 • 1-800-966-1186

**Customer Name:** Remediation Services, Inc.  
**Date Received:** August 5, 1994 at 09:05:37  
**Date Reported:** August 8, 1994  
**Submission #:** 9408000065  
**Project:** OIL CONTAMINATED STOCKPILE

**SAMPLES:** The submission consisted of 2 samples with sample I.D.'s shown in the attached data tables.

**TESTS:** The samples were analyzed for:  
\* BTEX (MOD 8020)  
\* LEAD/Pb (EPA 6010)  
\* MICROWAVE DIGESTION (EPA 3015)  
\* TPH DIESEL-RANGE (MODIFIED 8015)

**RESULTS:** See attached data table for results.

Distribution Of Reports:  
2-Remediation Services, Inc.  
Attn: John Inglehart  
Ph. 405-840-4434 Fax 405-840-9373

LAB NUMBER: 9408000065 lims

Respectfully Submitted,  
Anachem, Inc.

*James D. Lynch*  
James D. Lynch, Ph.D.  
Chemist

*C.E. Newton*  
C.E. Newton, Ph.D.  
Chemist

NOTE: Submitted material will be retained for 60 days unless notified or consumed in analysis. Material determined to be hazardous will be returned or a \$20 disposal fee will be assessed. Our letters and reports are for the exclusive use of the client to whom they are addressed. The use of our name must receive our prior written approval. Our letters and reports apply to the sample tested and/or inspected, and are not necessarily indicative of the qualities of apparently identical or similar materials.

Client Name: Remediation Services, Inc.  
 Submission#: 9408000065  
 Project Name: OIL CONTAMINATED STOCKPILE  
 Report Date: 08/08/94

APPENDIX C

**Client Sample #: C.S. 1**

Laboratory ID #: 34845 Matrix: Soil  
 Sample Container: 2x4oz EPA Approved Glass Jar\Black lid  
 Sampling Location: OIL CONTAMINATED STOCKPILE  
 Sampling Date: 08/03/94  
 Temperature (Celcius):4

**BTEX (MOD 8020)**

Analyte	Results(mg/kg)	M.D.L.	P.Q.L.
Benzene	<0.396	0.0396	0.396
Toluene	<0.253	0.0253	0.253
Ethyl Benzene	<0.469	0.0469	0.469
Xylenes	<0.421	0.0421	0.421

**LEAD/Pb (EPA 6010)**

Analyte	Results(mg/kg)	M.D.L.	P.Q.L.
Lead	<21.2	2.12	21.2

**TPH DIESEL-RANGE (MODIFIED 8015)**

Analyte	Results(mg/kg)	Det.Limit
Diesel-Range Petroleum Hydrocarbons	17	5.0
Oil-range TPH 76 mg/kg		

**Client Sample #: C.S. 2**

Laboratory ID #: 34846 Matrix: Soil  
 Sample Container: 2x4oz EPA Approved Glass Jar\Black & Green lid  
 Sampling Location: OIL CONTAMINATED STOCKPILE  
 Sampling Date: 08/04/94  
 Temperature (Celcius):4

**BTEX (MOD 8020)**

Analyte	Results(mg/kg)	M.D.L.	P.Q.L.
Benzene	<0.396	0.0396	0.396
Toluene	<0.253	0.0253	0.253
Ethyl Benzene	<0.469	0.0469	0.469
Xylenes	<0.421	0.0421	0.421

**LEAD/Pb (EPA 6010)**

Analyte	Results(mg/kg)	M.D.L.	P.Q.L.
Lead	<21.2	2.12	21.2

**TPH DIESEL-RANGE (MODIFIED 8015)**

Analyte	Results(mg/kg)	Det.Limit
Diesel-Range Petroleum Hydrocarbons	110	5.0
No evidence of oil was found in this sample.		

Report To: Remediation Services, Inc.  
 Project: Oil Contaminated Stockpile  
 Lab Number: 9408000065  
 Page 5 of 5

**QUALITY CONTROL DATA**

**DIESEL-RANGE TPH and BTEX results are reported in parts per million (ppm) in solid.**

	Value 1	Value 2	% Var.
DIESEL FUEL:	87.1	95.6	8.9
BTEX:	19.7	19.9	1.0
CONCENTRATION UNITS:	BTEX - ppm	TPH - ppm	
DETECTION LIMITS:	BTEX - 0.5	D.R.TPH - 5.0	
<u>ANALYST</u>	<u>ANALYTE</u>	<u>DATE EXTRACTED</u>	<u>DATE ANALYZED</u>
James Lynch	BTEX	8/05/94	8/05/94
Anthony Taylor	TPH	8/05/94	8/05/94

**QUALITY CONTROL DATA**

<u>ANALYTE</u>	<u>DATE ANALYZED</u>	<u>SPIKE VOL</u>	<u>STAND. DEV.</u>	<u>COEFF. OF VAR %</u>	<u>REC1%</u>	<u>REC2%</u>
Lead	8/5/94	250	7.5	3.2	99	106

Standard Deviation =  $(x1-x2)/1.414$

Coefficient of Variability % =  $(S.D./Avg.) \times 100$

Recovery % =  $[(\text{spiked-unspiked})/\text{expected}] \times 100$



DEPARTMENT OF THE ARMY  
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS  
CANNON AIR FORCE BASE RESIDENT OFFICE  
108 ENGINEERS WAY  
CANNON AIR FORCE BASE, NEW MEXICO 88103-5146  
PH (505) 784-4350 FAX (505) 784-2663

REPLY TO  
ATTENTION OF: .....

August 11, 1994

Construction-Operations Division  
Cannon AFB Resident Office

Serial Letter No. 2/TP-01401

SUBJECT: Contract DACA45-94-C-0100, Oil/Water Separator Removal,  
Cannon AFB, New Mexico; Safety Violations

Remediation Services Inc.  
924 N.W. 60th  
Oklahoma City, OK 73118

Gentlemen:

On August 11, 1994, my field personnel observed several safety violations on subject project. The excavated area has reached a depth of approximately twenty-five feet. No provisions have been taken to protect your employees from possible danger resulting from a slide or cave-in of the banks. In accordance with paragraph 3.12.8 of Specification Section 01401 you are required to provide shoring or slope the excavation back to stabilize the banks.

Additionally, no air sampling or exposure monitoring is being performed. In accordance with paragraph 3.10 of Specification Section 01401 you are required to implement and maintain an exposure monitoring/air sampling program to identify and quantify airborne levels of hazardous substances and safety and health hazards in order to assure proper selection of engineering controls, work practices, and personal protective equipment for site personnel. Currently there is no testing equipment on site and no personal protective equipment.

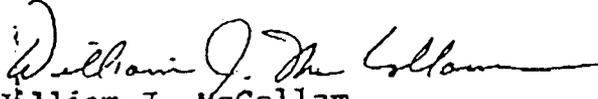
As a result of these safety violations, your field crew has been directed that no additional excavation will be performed until the violations are corrected.

We are also concerned with your lack of progress. Observance of your current operations reveals inefficiency due to the limited capabilities of the 580 Case backhoe currently being utilized. Your original contract completion date of August 11, 1994 has now expired. Please provide your action plan for contract completion no later than August 15, 1994.

-2-

Should you have any questions regarding this matter, contact  
Max Pastor at the Cannon Resident Office (505) 784-2861.

Sincerely,

  
William J. McCollam  
Authorized Contracting Officer

CESWA-CO-NA-C

24 August 1994

## MEMORANDUM FOR RECORD

SUBJECT: Contract DACA45-94-C-0100, Oil/Water Separator Removal, Cannon AFB, New Mexico; Contractor Deficient Performance

1. Subject Contractor Remedial Services Incorporated (RSI)'s performance to date has been unsatisfactory in the areas of effectiveness of management, quality control, and safety, as noted below. The following serves as the basis for a recommendation for a final unsatisfactory performance evaluation of subject Contractor.

2. Subject contract was awarded on 22 June 1994 to Remedial Services, Inc. Notice to Proceed was received on 29 June 1994. The contract duration is 45 days. The contract completion date is 13 August 1994.

3. A SHERP (Safety, health, emergency response) plan was required to be submitted and approved prior to work start up. A preconstruction conference was held on 25 July 1994. The SHERP and quality control plans were approved with comment. The contract requirements were reviewed, particularly regarding requirements for handling contaminated soil, i.e. sampling, stockpiling, manifest documents, and disposal.

3. The Contractor began physical work on 26 July 1994. The Government stopped the work this same date, after noting the Contractor's insurance policy was expired. The contract specifically requires a minimum amount of insurance for workman's comp and vehicle liability to allow any physical work on the jobsite.) Work resumed 28 July 1994 after the Government's receipt of a valid insurance certificate.

4. The tank and oil-water separator were removed without incident. Pumpable liquids were removed and sent off for testing. Contaminated soil was discovered on 01 August 1994. That same day, the undersigned visited the jobsite and noted that the contaminated soil was not being handled in accordance with the contract. The spoil pile was improperly stockpiled, and the required liner was not in place. Work was stopped and the superintendent was required to meet in the Resident Office to review the contract requirements. Subsequent discussion revealed that the Contractor had made no provisions to stockpile the material in accordance with the contract, and did not seem to be aware of the berm details or of the liner requirement; the required liner was not even on the jobsite. Additionally, the Contractor had not yet tested any materials to verify cleanliness, levels of contamination, etc., thereby causing unnecessary delays to the project. The site superintendent seemed totally unformed as to the contract requirements, and stated that he would call his office for direction. He also asked if he could haul away material before

23 August 1994

## MEMORANDUM FOR RECORD

SUBJECT: Contract DACA45-94-C-0100, Oil/Water Separator Removal, Cannon AFB, New Mexico; Contractor Deficient Performance

sampling and testing and receiving the test results. When told this was not possible, he accused the Government of delaying the project. When the contract requirements were read to him, he then acknowledged the contract.

4. The owner, Mr. John Inglehart of RSI, was contacted on 02 August 1994 and informed of the above. He stated that he had no liner as contractually required to use in stockpiling the contaminated material, because he "figured" he "wouldn't need it". Contract requirements for stockpiling, material sampling, and material disposal were then reviewed, until the undersigned felt the Contractor understood his contract.

5. As of 04 August 1994, the site appeared to be in order. Both contaminated and clean materials were stockpiled and stored in accordance with the details shown on the contract drawings and the specifications. The extent of the contaminated soil was not yet identified. The superintendent stated that to excavate further was outside the limits of his contract; however, a review of the drawings showed that he was still working within the contract limits. The contract required excavation up to 5 feet below the tank, or to about 13 feet, and a 1:1 slope outside the limits of the tank. Additionally, the removal of the contaminated soil was a separate unit price bid item, by the ton; 100 tons were identified in the bid schedule. When asked how many tons had been removed, the superintendent stated that he did not know. When asked where he was going to weigh it using certified scales, the superintendent stated that he did not know. Further, none of the required soil samples, neither clean or contaminated soil, had yet been taken for the required testing.

6. During this same site visit, the contractor's superintendent stated he needed a change order to continue, then also stated that he had no authority to negotiate or execute changes. When asked if he could reach all the apparent contaminated soil with a backhoe, he first said that he could not, then stated that he could. He was then directed to clean up the site as much as possible using his equipment on hand, until the excavation limits identified in the contract were reached.

7. RSI's owner John Inglehart was called that same day, 04 August 1994 at 1130 hrs. The above situation was summarized to him. He was informed that if he had to bring in other equipment to continue the excavation, it would necessitate a change order to the contract. He was also informed of his superintendent's lack of initiative to perform the work, comply with the contract, and the difficulty in dealing with him. Mr. Inglehart stated, "Yeah, I wish he'd do more". He then asked if he could take the required composite soil samples for testing; the undersigned replied that he

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23 August 1994

SUBJECT: Contract DACA45-94-C-0100, Oil/Water Separator Removal, Cannon AFB, New Mexico; Contractor Deficient Performance

could have done so a week ago, that he needed to sample and test both the apparent clean and the contaminated material before either could be removed from the site. The method of sampling, testing, and procedures for removal are detailed in the contract. He also stated that over 500 tons of material had been removed; however, he then admitted that he did not know the amount as none of it had been weighed.

8. On 05 August 1994, the Contractor took the required soil samples and sent them off for testing.

9. On 09 August 1994, as excavation continued, the Government discovered that the Contractor had not taken all required samples. The contract requires that samples are sent both to the Contractor's lab and to the Government's lab in Omaha; the latter had not yet been performed. This was also noted by the Air Force, who understandably became very concerned, as they faced a possible Notice of Violation if we did not meet EPA's closure date for the project. They also noted that the Contractor had removed the testing equipment from the jobsite.

10. On 11 August 1994, results from the soil samples indicated that some material was clean, and the other showed a very low level of contamination. However, work was halted by the Resident Office staff, as it was not being performed in a safe manner, nor in compliance with the contract. Reference Government Serial Letter No. 2 dated 11 August 1994, enclosure 1. The Contractor had overexcavated outside the limits of the contract. The depth of the pit was now about 25 feet in an isolated area; average depth was about 15 feet. The Contractor overexcavated both in depth and to the limits outside the tank, in an attempt to identify all contaminated material. No provisions were taken to protect the side slopes of the excavation from sliding or a cave-in. Material was again improperly stockpiled. No air sampling or exposure monitoring was being performed. No personal protective equipment or testing equipment was on site.

11. The contract completion date was 13 August 1994. Some additional time and money are owed the contractor for the additional excavation and subsequent backfill. However, the Government was concerned with the Contractor's lack of progress and inefficiency of operation. The Contractor was notified of such by the referenced Serial Letter No. 2, and by telephone. Reference CESWA-Memorandum for Record dated 11 August 1994, enclosure 2. After reviewing contract requirements which were not being accomplished, the Government expressed its concern of Mr. Inglehart's foreman to adequately interpret the contract specifications and pursue a timely completion of this project. The Government added that throughout the life of the Contract, the

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Government has been required to contact the owner directly to get any results on the jobsite and that communication between the Government and the foreman were not very successful. Mr. Inglehart stated that his foreman's inability to complete this job were becoming more apparent and that he would contact his field crew this evening and direct them to start hauling out the contaminated material. Mr. Inglehart added that the job should have been completed two weeks ago and if the job did not start moving, he would personally come to the jobsite to make it happen. The Government reminded the Contractor that the material had to be weighed in the trucks prior to disposal. Additionally, the Contractor's daily logs are being submitted incomplete and do not contain all the information required by the specifications. Contractor stated he would discuss these issues with his foreman. Conversation was then concluded.

12. On 15 August 1994, the EPA notified that Air Force that the ~~levels of contamination identified were of a low enough level that the material did not have to be hauled away, but could be used for backfill.~~ The undersigned then directed the Contractor's site crew accordingly. The Contractor was also reminded that he had not performed the contract required quantity survey, and that no weigh tickets or manifests had yet been submitted. The site superintendent stated that he would have to talk to the owner. Mr. Inglehart was informed of the above by phone and by Serial Letter No. 3 dated 16 August 1994; refer to Enclosure 3.

13. The quantity survey was performed by a licensed surveyor on 16 August 1994. No backfilling operation took place, as the Contractor had no equipment on site to do, no Proctor density curve, and no apparent work plan.

14. On 17 August 1994, the Contractor attempted to use a jumping jack (a very small, hand-held compactor tamper normally used to compact narrow, shallow, utility trenches) to compact the backfill. If he continued, it would take about six weeks to backfill and compact the excavated area. The Government suggested that he use a remote compactor capable of climbing grades. It was also noted that the Contractor had not established a moisture-density curve for the fill, and so had no procedure in place to obtain the required density. The Contractor then stated he would use a backhoe to compact the fill, a totally improper way to compact, which could not achieve the required 90% Proctor density. The undersigned again called RSI's owner, and informed him that he was not complying with the contract, that a moisture-density curve was required, that a backhoe could not be used as compaction equipment, and that a work plan of backfill and compaction operations was needed before the Contractor could continue work. The Government also stated that a modification would be issued for the additional

CESWA-CO-NA-C

23 August 1994

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Cannon AFB, New Mexico; Contractor Deficient Performance

excavation, backfill, and removal of material.

15. No work was performed 18-19 August 1994. The required moisture-density curve was performed, and the Contractor notified the Government that he was trying to locate a remote compactor. The Contractor also sent another superintendent to the site; the owner had not yet visited since the preconstruction conference.

16. No work was performed 20-22 August 1994. The Contractor brought a suitable remote compactor to the jobsite on 20 August, but it was inoperable until 23 August 1994.

17. As of 23 August 1994, backfill operations are ongoing, and the Contractor should be able to complete his contract, although he continues to experience equipment breakdowns. Based on the above discussion of the Contractor's problems with quality, safety, and management of the contract, and the extensive assistance from the Government, strongly recommend a final unsatisfactory performance evaluation is assigned to RSI for subject contract.



KAREN DURHAM-AGUILERA, P.E.  
Administrative Contracting Officer  
Resident Engineer

CF: CESWA-CO  
CESWA-CT (Van Nest)