December 22, 1992

HALLIBURTON NUS Project Number 3552

Northern Division
Naval Facilities Engineering Command
U.S. Naval Building 77-L
Philadelphia, Pennsylvania 19112-5094

ATTENTION: Mr. Jim Colter

Subject: Contract No. N62472-90-d-1298, CTO No. 0011
Waste Handling Activities - NAS Willow Grove

Dear Mr. Colter:

In accordance with a request issued to HALLIBURTON NUS Environmental Corporation by Mr. Frank Klanchar, HALLIBURTON NUS has recently completed a waste handling task at the NAS Willow Grove Activity. The purpose of this correspondence is to familiarize you with details of the project, which was completed prior to your assignment as Remedial Project Manager for RI/FS work at the activity.

The work was performed under Navy CLEAN Contract Task Order No. 0011. Verbal notification that HALLIBURTON NUS would be requested to perform the work occurred on September 8, 1992 with documentation and review material being provided by the Navy within two weeks of verbal notification. An accelerated schedule was required since the validity of laboratory data for samples of the drummed material was considered questionable beyond the end of October, 1992. A project scope and cost impact letter (CTO 0011 Cost Impact No. 4) was forwarded to Mr. Klanchar on October 1, 1992. Waste handling activities were completed at the site on October 29, 1992. Negotiation of the cost impact was completed on December 9, 1992. Submittal of this letter report is being completed in accordance with a delivery schedule established during the December 9th negotiations. A negotiation confirmation letter is included in the attached material.
PROJECT SCOPE

Four specific project tasks were outlined in the scope and cost impact correspondence forwarded to the Navy on October 1, 1992. These tasks were discussed with Mr. Klanchar prior to and during preparation of the correspondence. A brief description of each task is provided below.

Task 1 - Data Review

A preliminary review of available data and existing reports was completed in order to determine the approximate scope of the waste handling effort and to allow characterization of waste types. The majority of the available review information was included in draft and final reports for drum sampling, prepared by EA Engineering, and results of laboratory TCLP analysis of composite samples from two groups of drummed wastes generated during EAs' investigation of the Navy Fuel Farm. Preliminary review and evaluation work included determination of waste characterization and disposal requirements and telephone contacts with several disposal contractors to determine their analytical requirements and ability to accept the soil material as non-hazardous.

Task 2 - Subcontractor Procurement

Based on the information compiled and evaluated during Task 1, an estimate of the project requirements and associated costs was prepared and discussed with the Navy RPM. Upon agreement of the project requirements, specifications for subcontracted removal, disposal, and associated work were prepared. A copy of the specifications are included as an attachment to this correspondence. The specifications and bid package were submitted to seven potential bidders on October 1, 1992. Cost, qualifications, compliance with specification pre-award submittal requirements, and capability to handle all waste types, including disposal of soil as non-hazardous, without the need for additional sampling and analysis, were considered in the selection of a subcontractor. The firm Advanced Environmental Technology Corporation (AETC) was selected to perform the work. Bids for the
Task 3 - Field Activities

Field activities consisted of site reconnaissance, drum inventory, labeling, loading, and removal of the drums from the activity. Pre-removal inventory and observation of the drums and drum contents occurred during the week of October 19th, with final removal of the drums from the activity being performed on October 29, 1992. A total of 78 drums were removed from the activity for disposal at appropriately licensed facilities. Thirty four (34) of the drums were empty and did not require special handling. The remaining 34 drums were segregated into five groups according to their contents and were transported to three separate disposal facilities. At the time of this writing final destination manifests are not available. Availability of this information typically requires two to three months. Final destination manifests will be forwarded to your attention upon receipt by HALLIBURTON NUS from AETC. A breakdown of the five drum groups by contents is provided below along with the name of the disposal facilities.

- 3 drums of PPE and debris - ThermalKEM, Inc
- 3 drums of activated carbon - ThermalKEM, Inc
- 36 drums of soil - CWM-Model City
- 1 drum of mixed oil - CWM-SRR
- 1 drum of solvent and water - CWM-SRR

A detailed log of field activities was maintained by the HALLIBURTON NUS on site representative in a field log book. A copy of the appropriate log book pages is included in the attachments to this report. One labeled copy of site photographs taken during drum removal activities is also being forwarded with this report.
Task 4 - Reporting

This letter report constitutes the final task associated with the removal of investigation derived wastes from the Willow Grove Activity, as detailed within the original scope and cost impact letter. Attachments to this report provide additional detail and documentation of project activities.

Please call me at 412-921-8351 if you have any questions regarding the information provided within this submittal, or if I can be of assistance in any way.

Sincerely,

Donald W. Blackert PG
Project Manager

DWB/sic

cc:  R. Boucher
     D. Rule
     J. Trepanowski
     D. Wroblewski
     P. Patton
ATTACHMENTS

A) NEGOTIATION CONFIRMATION LETTER
B) WASTE HANDLING SPECIFICATIONS
C) WASTE PROFILES AND MANIFESTS
D) TSD FACILITY AUTHORIZATION FORM/SITE DESCRIPTION
E) AETC MANIFEST CORRESPONDENCE
F) SITE LOG BOOK
G) PHOTOGRAPHIC LOG
ATTACHMENT A

NEGOTIATION CONFIRMATION LETTER
December 16, 1992  
NC-KH-92-12044

Mr. David P. Rule  
Contracting Officer  
Northern Division, Code 0223  
Naval Facilities Engineering Command  
10 Industrial Highway, Mail Stop #82  
Lester, PA 19113  

Contract Task Order No. 11  

Subject: Confirmation of Negotiations for Cost Impact Letters #3 and #4  

Dear Mr. Rule:

This letter serves as a confirmation of negotiations conducted on December 9, 1992. The following were present during the negotiations: Navy personnel - Mr. Roger Boucher, Mr. Frank Klancher, Mr. Claude Graff and Lt. Lin; HALLIBURTON NUS personnel - Mr. John Trepanowski, Mr. Don Blackert and Ms. Kim Hanlon.

The Navy accepted cost impact letter #3 as proposed by HALLIBURTON NUS Environmental Corporation.

The following changes were made to cost impact letter #4:

- The project duration was extended by 17 weeks and PMO ODCs were added for this 17 week period.
- The Engineer P3 was changed to the P4 level.
- The Project Manager P4 was changed to the P3 level.
- The Engineer P2 hours under Task 1702 were reduced from 30 to 20.
- The travel costs proposed were deleted since the site visit by the Project Manager was not required; however, mileage costs of $64 (256 miles @ $.25/mile) were added to account for the field personnel’s travel to the site.
- The waste hauling subcontract cost was increased from $15,464 to $16,044.25. The revised total represents the actual costs incurred for the services.

All other direct labor hours and ODCs were accepted by the Navy as proposed.
HALLIBURTON NUS realizes that funding will not be issued for the CADD/WP/Computer costs until a new rate has been established. Once the new rate has been determined, HALLIBURTON NUS will request that a modification be issued by the Navy to fully fund the CTO.

The revised schedule for CTO#11 is as follows:

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Date</th>
<th>CDRL #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revised Rough Draft RI Report</td>
<td>June 5th, 1992</td>
<td>A0003A</td>
</tr>
<tr>
<td>Draft RI Report</td>
<td>July 21, 1992</td>
<td>A0004</td>
</tr>
<tr>
<td>Navy Comments</td>
<td>Dec. 23, 1992</td>
<td>A0005</td>
</tr>
<tr>
<td>Final RI Report</td>
<td>Jan. 20, 1993</td>
<td>A0006</td>
</tr>
<tr>
<td>Draft HRS PreScore Report</td>
<td>Aug. 20, 1992</td>
<td>A0007</td>
</tr>
<tr>
<td>Final HRS PreScore Report</td>
<td>Dec. 8, 1992</td>
<td>A0008</td>
</tr>
<tr>
<td>Waste Handling Documentation</td>
<td>Dec. 23, 1992</td>
<td></td>
</tr>
</tbody>
</table>

At this time, no additional funding is required for the cost portions of cost impact letters 1 through 4; however, since the project will be completed in the near future, the Award Fee Pool should be increased by the amounts negotiated for the scope increases to CTO#11. The total funding required is summarized below:

<table>
<thead>
<tr>
<th>Fee</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Impact #1 (3/25/92)</td>
<td>$1,329</td>
</tr>
<tr>
<td>Cost Impact #2 (4/28/92)</td>
<td>388</td>
</tr>
<tr>
<td>Cost Impact #3 (6/18/92)</td>
<td>347</td>
</tr>
<tr>
<td>Cost Impact #4 (10/1/92)</td>
<td>1,899</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$3,963</td>
</tr>
</tbody>
</table>

HALLIBURTON NUS
The total funding for CTO#11 is as follows:

<table>
<thead>
<tr>
<th>Previously Funded</th>
<th>Cost Impact Letters #1 - 4 (fee only)</th>
<th>Total CTO</th>
</tr>
</thead>
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<tr>
<td>Cost</td>
<td>$788,942</td>
<td>$788,942</td>
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<tr>
<td>Fee</td>
<td>32,749*</td>
<td>36,712</td>
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<tr>
<td>Total</td>
<td>$821,691</td>
<td>$825,654</td>
</tr>
</tbody>
</table>

*Includes deobligation of Award Fee for Period 2.

Should you have any questions, please feel free to call me at (301) 258-8644.

Sincerely,

[Signature]

Patricia A. Patton
Sr. Contract Administrator
Government Pricing and Administration

Attachments

cc: R. Boucher, U.S. Navy, NORTHDIV
J. Trepanowski, P.E. - HNUS, Wayne
D. Wroblewski, HNUS, Pittsburgh
D. Blackert, HNUS, Pittsburgh
DATE: 9 December 1992
FIRM: HALLIBURTON NUS Environmental Corp.
SITE: Willow Grove, PA
LOCATION: Naval Air Station – CTO #11
TITLE: Cost Impact No. 3

RATES:
<table>
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<tr>
<th>P4</th>
<th>32.89</th>
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<tr>
<td>P3</td>
<td>23.23</td>
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<tr>
<td>P2</td>
<td>18.18</td>
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<tr>
<td>P1</td>
<td>14.13</td>
</tr>
<tr>
<td>T2</td>
<td>12.78</td>
</tr>
<tr>
<td>ADMIN</td>
<td>11.25</td>
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</table>

CONFIRMATION OF NEGOTIATIONS

Estimate of Additional Costs
Resulting from Scope Changes

<table>
<thead>
<tr>
<th>Scope Changes</th>
<th>P3</th>
<th>P2</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Proj. Planning/Cost Imp. Prep.</td>
<td>4</td>
<td>6</td>
<td>10</td>
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<tr>
<td>Final Comps./Data Review</td>
<td>20</td>
<td>28</td>
<td>48</td>
</tr>
<tr>
<td>Draft Report</td>
<td>4</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Subtotal</td>
<td>28</td>
<td>46</td>
<td>74</td>
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<tr>
<td>Rate</td>
<td>23.23</td>
<td>18.18</td>
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<tr>
<td>Cost</td>
<td>650.4</td>
<td>836.28</td>
<td>1,487</td>
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</tbody>
</table>

Overhead at 115%
Subtotal

Other Direct Costs
None
Subtotal

SUBTOTAL DL, OH, ODCs

G&A at 8.7%

SUBTOTAL OF ALL COSTS EXCEPT TRAVEL AND SUBCONTRACTS

AWARD FEE AT 10% (Excludes Travel & Subcontracts)

TOTAL COST AND FEE ASSOCIATED WITH COST IMPACT #3

$3,822
DATE: 16-Dec-92
FIRM: HALLIBURTON NUS Environmental Corp.
SITE: Willow Grove, PA
LOCATION: Naval Air Station – CTO #11
TITLE: Cost Impact No. 4

CONFIRMATION OF NEGOTIATIONS
w/o computer costs

ESTIMATE OF COSTS
Scope Changes
Direct Labor
Task 97, 98, 99 Direct Labor
Subtotal
Overhead at 115%
Subtotal

Other Direct Costs
ODCs
Task 97, 98, 99 ODCs
Equipment
Travel
Subtotal

SUBTOTAL DL, OH, ODCs

G&A at 8.7%
SUBTOTAL

SUBTOTAL OF ALL COSTS EXCEPT TRAVEL AND SUBCONTRACTS

AWARD FEE AT 10% (Excludes Travel & Subcontracts)
TOTAL HALLIBURTON NUS COST AND FEE

SUBCONTRACTOR COSTS
Waste Hauling
G&A @ 8.7%
Subtotal
Award Fee @ 5%
TOTAL SUBCONTRACTOR COST AND FEE

TOTAL COST AND FEE ASSOCIATED WITH SCOPE CHANGE #4

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<th>Revised Total</th>
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<tr>
<td>Fee</td>
<td>$28</td>
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<tr>
<td>Total</td>
<td>$311</td>
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<table>
<thead>
<tr>
<th></th>
<th>Revised Total</th>
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</thead>
<tbody>
<tr>
<td>Cost</td>
<td>$27,778</td>
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<tr>
<td>Fee</td>
<td>$1,899</td>
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<tr>
<td>Total</td>
<td>$29,677</td>
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</table>
DATE: 16-Dec-92
FIRM: HALLIBURTON NUS Environmental Corp.
SITE: Willow Grove, PA
LOCATION: Naval Air Station – CTO #11
TITLE: Cost Impact No. 4

RATES:
- P4 32.89
- P3 23.23
- P2 18.18
- P1 14.13
- T2 12.78
- ADMIN 11.25
- OVH 115.00%
- G&A 8.70%
- FEE 10.00%

CONFIRMATION OF NEGOTIATIONS

<table>
<thead>
<tr>
<th>Description</th>
<th>Rate</th>
<th>Value</th>
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<tbody>
<tr>
<td>Direct Labor</td>
<td></td>
<td></td>
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<tr>
<td>Task 97, 98, 99 Direct Labor</td>
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<td></td>
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<tr>
<td>Subtotal</td>
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<tr>
<td>Overhead at 115%</td>
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<td>$4,626</td>
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<tr>
<td>Subtotal</td>
<td></td>
<td>$8,649</td>
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<tr>
<td>Other Direct Costs</td>
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</tr>
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<td>ODCs</td>
<td></td>
<td>$669</td>
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<tr>
<td>Task 97, 98, 99 ODCs</td>
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<td>$308</td>
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<tr>
<td>Equipment</td>
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<td>$80</td>
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<td>Travel</td>
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<td>Subtotal</td>
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<td>$1,121</td>
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<tr>
<td>SUBTOTAL DL, OH, ODCs</td>
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<td>$9,770</td>
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<tr>
<td>G&amp;A at 8.7%</td>
<td></td>
<td>$850</td>
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<tr>
<td>SUBTOTAL</td>
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<td>$10,620</td>
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<tr>
<td>SUBTOTAL OF ALL COSTS EXCEPT TRAVEL AND SUBCONTRACTS</td>
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<td>$10,556</td>
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<tr>
<td>AWARD FEE AT 10% (Excludes Travel &amp; Subcontracts)</td>
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<td>$1,056</td>
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<tr>
<td>TOTAL HALLIBURTON NUS COST AND FEE</td>
<td></td>
<td>$11,676</td>
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SUBCONTRACTOR COSTS

<table>
<thead>
<tr>
<th>Description</th>
<th>Rate</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste Hauling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G&amp;A @ 8.7%</td>
<td></td>
<td>$1,396</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>$17,440</td>
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<tr>
<td>Award Fee @ 5%</td>
<td></td>
<td>$872</td>
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<td>TOTAL SUBCONTRACTOR COST AND FEE</td>
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<td>$18,312</td>
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<tr>
<td>TOTAL COST AND FEE ASSOCIATED WITH SCOPE CHANGE #4</td>
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<td>$29,988</td>
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CTO#11 – COST IMPACT NOTIFICATION NO. 4  
WILLOW GROVE, PENNSYLVANIA  
DIRECT LABOR ESTIMATE

<table>
<thead>
<tr>
<th>TASK 1700</th>
<th>TASK 1701</th>
<th>TASK 1702</th>
<th>TASK 1703</th>
</tr>
</thead>
<tbody>
<tr>
<td>P4</td>
<td>P4</td>
<td>P3</td>
<td>P3</td>
</tr>
<tr>
<td>1</td>
<td>20</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>4</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
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<td>32</td>
<td>4</td>
</tr>
<tr>
<td>25</td>
<td>30</td>
<td>32</td>
<td>25</td>
</tr>
<tr>
<td>TOTAL HOURS</td>
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<td>68</td>
<td>28</td>
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<tr>
<td>x RATE</td>
<td>32.89</td>
<td>23.23</td>
<td>18.18</td>
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<td>TOTAL COST</td>
<td>65.78</td>
<td>1579.64</td>
<td>509.04</td>
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<td></td>
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OTHER DIRECT COST ESTIMATE

<table>
<thead>
<tr>
<th>Units</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone @ $6/call</td>
<td>50</td>
</tr>
<tr>
<td>CADD/ WP @ $10/hr</td>
<td>20</td>
</tr>
<tr>
<td>Mail @ $9.66/pk</td>
<td>10</td>
</tr>
<tr>
<td>Repro @ $.07/pg</td>
<td>600</td>
</tr>
<tr>
<td>Film &amp; Developing</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
</tr>
</tbody>
</table>

EQUIPMENT

| HNU @ $40/DAY | 2 | $80 |
| TOTAL |       | $80 |

TRAVEL

| Per Diem @ $106 | 0 | $0 |
| Car Rental @ $40/d | 0 | $0 |
| Parking @ $7.5/day | 0 | $0 |
| Airfare* @ $674 | 0 | $0 |
| Pittsburgh to Philadelphia | |
| Mileage | 256 | 64 |
| TOTAL |       | $04 |
CTO NO 11 – WILLOW GROVE, PA – COST IMPACT LETTER NO 4
HALLIBURTON NUS PROGRAM MANAGEMENT COSTS

<table>
<thead>
<tr>
<th></th>
<th># of Weeks</th>
<th># of Item Weeks</th>
<th>Program Manager P4</th>
<th>Deputy P4</th>
<th>Project P3</th>
<th>Contract Admin P3</th>
<th>Contract Admin P3</th>
<th>Contract Admin P3</th>
<th>Project Admin P4</th>
<th>Tech P4</th>
<th>Tech P3</th>
<th>Tech P2</th>
<th>Tech ADMIN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>TASK 97: Contracts Program Management</td>
<td>Duration 17</td>
<td>active 0</td>
<td>4.25</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P4, CTO Admin, 25 hrs x # wks</td>
<td>Procurement, 10hrs/proc, P3/2, non-lab</td>
<td>Waste Hauling</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Procurement, lab, 4hrs/ea, P4</td>
<td>Non-team, non-lab, SubK Admin, 5hr/wk, P3/2</td>
<td>Team SubK Admin, 1hr/wk P3/2</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lab Admin, 5hr/wk P4</td>
<td>Subcontract Closeout, 2hr/subk, P3/P2</td>
<td>OCI Routing, 3hrs, P3/2</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>Rate Offender Tracking, P4, 1hr</td>
<td>Document Maintenance, P2</td>
<td>Database Mgmt, 25hr/wk, P3/2</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>4.25</td>
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<tr>
<td>Admin. Support, 5hr/wk</td>
<td></td>
<td></td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>8.5</td>
<td>0</td>
<td>8.5</td>
</tr>
</tbody>
</table>

**TASK 97 SUBTOTAL**

| | 0 | 0 | 5.25 | 0 | 19.25 | 8.5 | 0 | 0 | 0 | 0 | 33 |

**TASK 98: Technical Program Management**

If < 24 weeks duration:

| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Else, if > 24 weeks duration:

| Program Mgr, 25 hr/wk | 4.25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.25 |
| Deputy, 5 hr/wk | 6.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8.5 |
| Prjct. Admin, 25hr/wk | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.25 | 0 | 0 | 0 | 4.25 |
| Project Manager Reporting | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 16 |

**TASK 98 SUBTOTAL**

| 4.25 | 8.5 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 |

**TASK 99: Cost impact Preparation**

| 0 | 2 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |

**Total Hours**

| 32.89 | 32.89 | 23.23 | 32.89 | 23.23 | 18.18 | 11.25 | 14.13 | 32.89 | 23.23 | 18.19 | 11.25 | 76 |

**Rate**

| 140 | 345 | 511 | 173 | 0 | 386 | 96 | 60 | 0 | 0 | 0 | 0 | 1,711 |

**OTHER DIRECT COSTS**

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<td>Liquid Waste Disposal</td>
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<td>LUMP SUM</td>
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<td></td>
<td>$16,044.25</td>
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ATTACHMENT B

WASTE HANDLING SPECIFICATIONS
WASTE HANDLING SPECIFICATIONS
for
NAS Willow Grove
Montgomery County, Pennsylvania

Northern Division
Naval Facilities Engineering Command
Contract Number N62472-90-D-1298
Contract Task Order 0011

October 1992
DRAFT

WASTE HANDLING SPECIFICATIONS
FOR
NAS WILLOW GROVE
MONTGOMERY COUNTY, PENNSYLVANIA

COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY (CLEAN) PROGRAM

Submitted to:
Northern Division
Naval Facilities Engineering Command
10 Industrial Highway, MS #82
Lester, Pennsylvania 19113

Prepared by:
HALLIBURTON NUS Environmental Corporation
661 Andersen Drive
Pittsburgh, Pennsylvania 15220

CONTRACT NUMBER N62472-90-D-1298
CONTRACT TASK ORDER 0011

OCTOBER 1992

SUBMITTED BY:                  APPROVED FOR SUBMISSION BY:

DONALD BLACKERT
PROJECT MANAGER

JOHN J. TREPANOWSKI, P.E.
PROGRAM MANAGER
ATTACHMENT 1

STATEMENT OF WORK
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
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<tr>
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<td>1.0</td>
<td>BACKGROUND AND GENERAL INFORMATION</td>
</tr>
<tr>
<td>1.1</td>
<td>DESCRIPTION AND QUANTITY OF WASTE MATERIAL</td>
</tr>
<tr>
<td>1.1.1</td>
<td>Soil Wastes</td>
</tr>
<tr>
<td>1.1.2</td>
<td>Activated Carbon</td>
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<td>1.1.3</td>
<td>Personal Protective Equipment</td>
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<td>Liquid Waste</td>
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<td>1.2</td>
<td>SAMPLING AND ANALYSIS</td>
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<td>TRANSPORTATION</td>
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<td>3.0</td>
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<td>APPENDICES</td>
</tr>
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<td>A</td>
<td>LABORATORY DATA REPORT</td>
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### TABLES

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<td>1</td>
<td>VOC and Pesticide Summary Results (µg/L)</td>
<td>1-4</td>
</tr>
<tr>
<td>2</td>
<td>Extracted Metals Analytical Parameters</td>
<td>1-4</td>
</tr>
<tr>
<td>3</td>
<td>Additional Analytical Parameters</td>
<td>1-4</td>
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### FIGURES

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<tr>
<th>NUMBER</th>
<th>FIGURE DESCRIPTION</th>
<th>PAGE</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Location Map, NAS Willow Grove</td>
<td>1-2</td>
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</tbody>
</table>
1.0 BACKGROUND AND GENERAL INFORMATION

In accordance with a task assignment issued by the Northern Division, Naval Facilities Engineering Command, HALLIBURTON NUS Environmental Corporation (HALLIBURTON NUS) has prepared this specification for transportation, offsite treatment or disposal, documentation, and associated work required for management of drummed waste material. Material to be handled in accordance with these specifications was derived from site investigation activities at Naval Air Station Willow Grove, Horsham Township, Montgomery County, Pennsylvania. A Site Location Map is provided as Figure 1. The investigation derived wastes were generated during drilling, sampling, and testing of monitoring wells and soil borings at a fuel farm located within the air station. All drums are currently staged in a central location at the NAS Willow Grove facility.

The work involves properly labeling, loading, transporting, and offsite treatment or disposal of 41 17H-type 55-gallon drums of contaminated soil, used activated carbon canisters (55-gallon size), jet fuel waste, and contaminated personal protective equipment. All disposal includes drums as well as drum contents.

The wastes have not been identified as RCRA listed or characteristic hazardous wastes. However, if in the judgment of the subcontractor, based on the information provided within this specification, they should be handled as such, the subcontractor shall inform HALLIBURTON NUS of this determination in their response to this solicitation.

1.1 DESCRIPTION AND QUANTITY OF WASTE MATERIAL

1.1.1 Soil Wastes

Soil waste to be handled includes 34 full or nearly-full drums of soil material derived from installation of wells and borings at the site. The material is considered to be nonhazardous by virtue of its origin within a fuel farm not known or suspected to have stored hazardous waste. All 34 drums of soil material at the site were included in a composite sampling and laboratory analysis project. A description of this work, and the analytical results, are discussed in Section 1.2 and a copy of the laboratory reports is included as an attachment to these specifications.
FIGURE 1

LOCATION MAP
NAS WILLOW GROVE
HORSHAM TOWNSHIP, PA
1.1.2 **Activated Carbon**

Three drums of used activated carbon are included within the scope of the work. The carbon canisters were used to treat groundwater derived from the fuel farm during site investigation and testing. It is anticipated that organic contaminants associated with the fuel farm, particularly jet fuel related compounds, have been adsorbed by the carbon. No laboratory analysis of this material has been completed. Since the drums were used for removal of organic compounds from water, they contain significant amounts of water in addition to the contaminated carbon medium.

1.1.3 **Personal Protective Equipment**

Personal protective equipment such as used coveralls, gloves, and sampling equipment has been containerized in 3 drums. Disposal of these drums and materials is included within the scope of the work. No laboratory analysis of drum contents has been completed, however, it is not anticipated that the drum contents are hazardous due to the nature of their origin and use.

1.1.4 **Liquid Waste**

One drum, approximately half full, contains liquid waste to be handled under the scope of this project. The waste is derived from sampling and testing of site wells that contain free-phase jet fuel product. This material has not been analyzed to determine percent water or BTU value.

1.2 **SAMPLING AND ANALYSIS**

Thirty-four drums of investigation derived soil wastes were sampled for full TCLP analysis. The drums were divided into two groups based on their estimated probability of containing significant contaminant concentrations. One composite sample was obtained from each group. Laboratory analysis of these samples indicated that contaminant concentrations in both groups exceeded maximum allowable levels for classification as clean fill material. A summary of the TCLP analytical results for all detected parameters is provided in Tables 1, 2, and 3, and copies of the laboratory analytical reports are included as an appendix to these specifications.

No sampling was performed for the contents of the carbon canisters, liquid waste, or PPE drums. It is anticipated that the liquid jet fuel waste will be either recycled or incinerated. Since no analytical data is available for the carbon waste, it is probable that incineration or regeneration will be required. Drums of used PPE are considered to be an industrial waste acceptable for landfill disposal.
### TABLE 1

**VOC AND PESTICIDE SUMMARY RESULTS (µg/L)**

NAS WILLOW GROVE, PENNSYLVANIA

<table>
<thead>
<tr>
<th>Sample ID</th>
<th>Methylene Chloride</th>
<th>Acetone</th>
<th>Toluene</th>
<th>E-Benzene</th>
<th>Xylenes</th>
<th>Heptachlor</th>
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<tbody>
<tr>
<td>WGl-DS</td>
<td>2*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WG2-DS</td>
<td>45*</td>
<td>81</td>
<td>48</td>
<td>20</td>
<td>78</td>
<td>0.16**</td>
</tr>
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</table>

* 10 ppb detected in laboratory extraction blank
** Detection threshold

### TABLE 2

**EXTRACTED METALS ANALYTICAL PARAMETER (µg/L)**

NAS WILLOW GROVE, PENNSYLVANIA

<table>
<thead>
<tr>
<th>Analytical Parameter</th>
<th>Sample WG1-DS</th>
<th>Sample WG2-DS</th>
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<tbody>
<tr>
<td>Arsenic, Extracted</td>
<td>&lt;54.0</td>
<td>&lt;54.0</td>
</tr>
<tr>
<td>Barium, Extracted</td>
<td>3.530</td>
<td>2.120</td>
</tr>
<tr>
<td>Cadmium, Extracted</td>
<td>&lt;4.0</td>
<td>&lt;4.0</td>
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<tr>
<td>Chromium, Extracted</td>
<td>20.4</td>
<td>8.3</td>
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<tr>
<td>Lead, Extracted</td>
<td>&lt;100</td>
<td>&lt;100</td>
</tr>
<tr>
<td>Mercury, Extracted</td>
<td>&lt;0.2</td>
<td>&lt;0.2</td>
</tr>
<tr>
<td>Selenium, Extracted</td>
<td>&lt;27.0</td>
<td>&lt;27.0</td>
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<tr>
<td>Silver, Extracted</td>
<td>4.0</td>
<td>4.3</td>
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Additional TCLP criteria provided in attached laboratory reports.

### TABLE 3

**ADDITIONAL ANALYTICAL PARAMETERS**

NAS WILLOW GROVE, PENNSYLVANIA

<table>
<thead>
<tr>
<th>Analytical Parameter</th>
<th>Units</th>
<th>Sample WG1-DS</th>
<th>Sample WG2-DS</th>
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<tr>
<td>Corrosivity</td>
<td>pH Units</td>
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</tr>
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<td>Cyanide, Releasable</td>
<td>mg/kg (dry)</td>
<td>&lt;0.16</td>
<td>&lt;0.15</td>
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<tr>
<td>Hydrocarbons, Total</td>
<td>mg/kg (dry)</td>
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<td>Ignitable</td>
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<td>No</td>
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<tr>
<td>Reactive</td>
<td>None</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Sulfide, Releasable</td>
<td>mg/kg (dry)</td>
<td>12.4</td>
<td>17.0</td>
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</table>

Additional TCLP criteria provided in attached laboratory reports.

**NOTE:** Sample WG1-DS was a composite from 9 drums. Sample WG2-DS was a composite from 25 drums.
2.0 TRANSPORTATION

The subcontractor must possess a current valid RCRA permit and/or state certificate/permit/registration/license for the transportation of the wastes as described in Section 1.0. The subcontractor shall furnish the transport vehicle, crew, all necessary tools, and all miscellaneous materials required to complete transportation of the contaminated soil, PPE, liquid waste and carbon waste to the appropriate facilities. The crew and/or driver must be properly licensed/certified/trained for the transportation of these materials/wastes in accordance with applicable Federal and state regulations. The vehicle must be in good working condition. The vehicle must also meet all current DOT and/or vehicle state standards and must possess current valid state inspection documentation.

The subcontractor will be responsible for safely loading the drums from a central location onto the transport vehicle. Furthermore, the subcontractor will also be responsible for securing the drums on or within the transport vehicle.

The subcontractor shall be responsible for properly labeling each drum prior to loading any drums onto the transport vehicle. Drum labeling shall be performed in compliance with DOT hazardous waste transportation regulations, applicable RCRA hazardous waste transportation regulations and/or state hazardous waste transportation regulations.

The subcontractor shall be responsible for properly placarding the transport vehicle prior to loading the drums. Furthermore, the subcontractor shall be responsible for notifying the proper authorities of any accidents or incidents involving this waste.
3.0 SUBCONTRACTOR QUALIFICATIONS

The subcontractor, as well as any waste disposal, incineration, regeneration, or recycling facility used by the subcontractor, shall meet all Federal and/or State licensing, permitting, certification or other requirements for transportation and proper disposal of the waste material as described in Section 1.0.

The subcontractor, including all subcontractor project personnel, shall be fully qualified and experienced in the requirements of all sections of this specification, including, but not limited to, spill control and emergency release response, as appropriate.
4.0 DOCUMENTATION

The subcontractor shall initiate and complete all manifests and other forms necessary for the transport and treatment or disposal of the materials. HALLIBURTON NUS will assist with the generator portions of the forms. The completed manifests and other paper work shall be submitted to HALLIBURTON NUS for review prior to shipment.
5.0 SUBCONTRACTOR LICENSES/PERMITS/REGISTRATIONS/CERTIFICATES

All required Federal and/or state permits/licenses/registrations/certificates required for the handling, transportation, treatment, disposal, and/or incineration of hazardous waste must be current and valid. Furthermore, the subcontractor must assure HALLIBURTON NUS that all said permits/licenses/registrations/certificates will remain valid during the term of the service requested in this Request for Proposal.
6.0 SPILL CONTROL

For the purpose of reporting a spill to the proper authorities as described in this specification, a spill shall be defined as any release of any drummed material, excluding waste released as part of charging the incinerator. Spill remediation will be conducted by the Subcontractor at the Subcontractor’s expense.

The subcontractor shall be responsible for all spills occurring during handling and transportation of the drummed wastes. The subcontractor will also be responsible for providing contingency measures for all potential spills.

Offsite spill control shall be governed by applicable RCRA, DOT, Federal and/or state requirements.

Onsite spill control will consist of the subcontractor providing equipment and personnel to perform the required remedial activities.

In the event of a spill or release, the subcontractor shall follow the procedures outlined below:

If a spill or release is reportable in accordance with Federal regulations 40 Code of Federal Regulations (CFR) 302 and 40 CFR 117, and/or human health or the environment are threatened, the subcontractor shall immediately contact the following agencies:

- HALLIBURTON NUS
- U.S. Environmental Protection Agency
- Local emergency services
- The appropriate state emergency response agency

Following the release, immediate emergency measures should be taken. These measures include, but are not limited to:

- Isolate hazardous areas from entry
- Prevent physical contact with released material
- Stay upwind and avoid low areas
- Keep combustible materials, open flames, and heat sources away from released materials
Use water mist to control vapors, as needed
Other actions as recommended in DOT Emergency Response Guide or as otherwise needed

General spill control actions the subcontractor will implement are presented below:

- **Solid spills**: remove and place contaminated materials into dry containers and cover; label the containers to identify the contents; and dispose of the container in accordance with this specification or applicable Federal and/or state requirements.

- **Liquid spills**: absorb with sand, clean fill or other noncombustible materials; dispose of the absorbent/spill material in the manner described in the solid spills section, immediately above.

Decontamination procedures may be required after a spill remediation to eliminate all traces of the spilled materials or reduce the contaminant concentrations to regulatory or acceptable levels. Complete remediation may require removal of contaminated soils and debris. Personnel decontamination should include showers and cleansing or disposing clothing and equipment. All contaminated materials including solvents, cloth, soil, and wood cannot be decontaminated and should be containerized, labeled, transported or disposed in accordance with this specification or in accordance with Federal and/or state regulations.

All releases regarding this waste must be documented by the subcontractor as a written report. The subcontractor shall send copies of the report to HALLIBURTON NUS and appropriate Federal and/or state agencies. All reports should be received by the regulatory agencies within 24 hours of the release. Continued documentation may be required by Federal and/or state agencies. HALLIBURTON NUS should receive copies of the continuing documentation.
7.0 ENVIRONMENTAL PROTECTION

For the purpose of this specification, environmental protection is defined as the retention of the environment in its current state. Environmental protection requires consideration of air, water and land resources and involves noise, solid waste management and management of other wastes. In order to prevent and to provide for abatement and control of any environmental pollution arising from the activities in performance of this specification, the subcontractor shall comply with all applicable Federal, state, and local requirements concerning environmental pollution control and abatement.

HALLIBURTON NUS will notify the subcontractor, in writing, of any observed noncompliance with the aforementioned Federal, state, and local pollution control and abatement requirements. Failure of HALLIBURTON NUS to notify the subcontractor of such noncompliance activities does not relieve the subcontractor of the responsibility of complying with such requirements. The subcontractor shall, after receipt of such notice, immediately inform HALLIBURTON NUS of proposed corrective actions and take such actions as appropriate. If the subcontractor fails or refuses to comply promptly, HALLIBURTON NUS may issue an order stopping all or part of the work, until satisfactory corrective action has been taken. No part of the time, capacity, or equipment lost because of the issuance of any such stop work order shall be made the subject of a claim for extension of time, or for excess costs or damages by the subcontractor.
8.0 PRICE QUOTATION

Subcontractor prices shall be submitted in direct accordance with the Price Quotation Form provided and in conformance with all work requirements described in the specification. Quoted prices will be valid for a period of 90 days from the bid due date. The Price Quotation Form must be signed and dated prior to submittal.

The quantities stated on the Price Quotation Form are best estimates of the actual quantities of work required. HALLIBURTON NUS does not guarantee that the quantities are exact and reserves the right to vary quantities of any item. In the event that variance from the Price Quotation Form quantities occurs, the project cost will be adjusted in accordance with the unit prices provided on the Price Quotation Form.

The entire cost of the project shall be included in the items shown on the Price Quotation Form. Any incidental or additional costs associated with the work, including, but not limited to material classification, segregation, packaging (including overpacking if required), drafting packing slips, drum labeling, documentation, temporary storage, freight, etc., shall be included under the six items on the Price Quotation Form.

If it is the subcontractor's determination that the cost of the project cannot be provided on the Price Quotation Form due to additional unspecified requirements or material classifications, this determination shall be clearly indicated on the Price Quotation Form as well as in a cover letter provided with the subcontractor's bid.
# PRICE QUOTATION FORM
## WASTE HANDLING AND DISPOSAL SERVICES
### NAS WILLOW GROVE, PENNSYLVANIA

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<th>Unit Cost</th>
<th>Estimated Number of Units</th>
<th>Extended Cost</th>
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<td>1. Drummed Soil Waste Disposal</td>
<td>/drum</td>
<td>34 drums</td>
<td></td>
</tr>
<tr>
<td>55-Gallon Drums</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Drummed PPE Waste Disposal</td>
<td>/drum</td>
<td>3 drums</td>
<td></td>
</tr>
<tr>
<td>55-Gallon Drums</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Drummed Activated Carbon Disposal</td>
<td>/drum</td>
<td>3 drums</td>
<td></td>
</tr>
<tr>
<td>55-Gallon Drums</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Drummed Jet Fuel Waste</td>
<td>/drum</td>
<td>1 drum</td>
<td></td>
</tr>
<tr>
<td>55-Gallon Drum Approximately Half Full</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Manpower Equipment and Supplies</td>
<td>/job</td>
<td>lump sum</td>
<td></td>
</tr>
<tr>
<td>6. Vehicle and Transportation Charges</td>
<td>/job</td>
<td>lump sum</td>
<td></td>
</tr>
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</table>

Total Items 1 through 6

Bidder's Signature

Title

Company Name

Date
APPENDIX A
LABORATORY DATA REPORT
ATTACHMENT C

WASTE PROFILES AND MANIFESTS
November 9, 1992

Mr. Don Blackert  
Halliburton NUS Environmental Corp.  
661 Andersen Drive  
Pittsburgh, PA 15220

Dear Don:

Thank you for the opportunity to service the Willow Grove Naval Air Station. Enclosed is a copy of our B.O.L. which shows the number of drums and the wastestreams removed on October 29, 1992 and a copy of the manifest. If you need any additional paperwork, please contact me.

I'd like to continue our working relationship with Halliburton NUS and would appreciate the opportunity to bid on future projects.

Thanks again.

Sincerely,

Karen Ockford  
Technical Sales Representative

KO/co

Specialists in Chemical and Hazardous Waste Management
## Field Services

### Shipping/Receiving

**Company:** Willow Grove NAS  
**Address:** RT 611  
**City/State:** Willow Grove, PA 19090-5510  
**Destination:** AETC (N-3)  
**Transporter:** AETC  
**Placard:** None  
**Date:** 10-29-92

### Units

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<th>DISPOSAL CODE</th>
<th>AETC PRODUCT CODE</th>
<th>DESCRIPTION</th>
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<tr>
<td>1</td>
<td>55 gal. 0m</td>
<td>400</td>
<td>SRK 28089</td>
<td></td>
<td>JP-5, H2O</td>
</tr>
<tr>
<td>3</td>
<td>55 gal. 0m</td>
<td>500</td>
<td>MOCJ 15743</td>
<td></td>
<td>Soil w/ Solvent</td>
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<tr>
<td>3</td>
<td>55 gal. 0m</td>
<td>1200</td>
<td>37-56170</td>
<td></td>
<td>Activated Carbon</td>
</tr>
<tr>
<td>1</td>
<td>55 gal. 0m</td>
<td>600</td>
<td>SF-85364</td>
<td></td>
<td>PF Conty F List Solvent 75</td>
</tr>
<tr>
<td>3</td>
<td>55 gal. 0m</td>
<td>17500</td>
<td>MOCJ 15743</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**OVERPACKED INTO 85 GALLON DRUM - BILL TO -**  
ON DOCK  
HALLIBURTON NUS ENVIRONMENTAL CORP.  
910 CLOPPER RD  
GAITHERSBURG, MD. 20877 - 0962

**TOTAL DRUMS:** 20.500  
**TOTAL PIECES:** 20.500  
**SUBJECT TO CHANGE BY SCALE**

### MANPOWER

<table>
<thead>
<tr>
<th>NAME</th>
<th>TIME IN</th>
<th>TIME OUT</th>
<th>LUNCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-Lane</td>
<td>2:45</td>
<td>2:45</td>
<td>~</td>
</tr>
<tr>
<td>M. Wadd</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Nave:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### MATERIALS / EQUIPMENT

<table>
<thead>
<tr>
<th>NAME</th>
<th>VOLUME</th>
<th>CODE</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>VERMICULITE</td>
<td>10035</td>
<td>25</td>
<td>17TH DRUMS</td>
</tr>
<tr>
<td>SAWDUST</td>
<td>10/25/1002</td>
<td>17TH DRUMS</td>
<td>10903</td>
</tr>
<tr>
<td>16 GALLON METAL RECOVERY</td>
<td>10111</td>
<td>10 GAL METAL RECOVERY</td>
<td>10918</td>
</tr>
<tr>
<td>165 GAL METAL RECOVERY</td>
<td>10913</td>
<td>ENVIROFAX PLASTIC RECOVERY</td>
<td>10926</td>
</tr>
<tr>
<td>12A50 FIBER</td>
<td>10223</td>
<td>12B16 FIBER</td>
<td>10925</td>
</tr>
<tr>
<td>12B20 FIBER</td>
<td>10222</td>
<td>12B26 FIBER</td>
<td>10921</td>
</tr>
<tr>
<td>30 GAL</td>
<td>21C FIBER</td>
<td>21C FIBER</td>
<td>11025</td>
</tr>
</tbody>
</table>

### EQUIPMENT LEVEL

<table>
<thead>
<tr>
<th>a</th>
<th>b</th>
<th>c</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TRAVEL TIME

<table>
<thead>
<tr>
<th>ROUND TRIP</th>
<th>MILEAGE ROUND TRIP</th>
<th>OVERNIGHT JOB</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### COMMENTS

Also Removed 34 x 55 gal. empty 17h. 0.2500 qty.

Pat Kelly, CAMPO, JT
UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's U.S. EPA ID No: PA-17000158

2. Manifest No: 001

3. State: NJ

4. Generator's Name and Mailing Address:
   WILLOW GROVE NAVAL AIR STATION RT 611
   WILLOW GROVE PA 19090-5010

5. Inspected by Company Name:
   ENVIRONMENT TRANSFER CORP
   N J D 9 9 1 2 9 1 5 8 4

6. Inspected Company Address:
   1 EDEN LANE
   FLANDERS, NJ 07836

7. HAZARDOUS WASTE, LIQUID, n.o.s.
   X (METHYLENE CHLORIDE, TOLUENE) 9, NA3082, III
   001 DM 00400 P F002

8. HAZARDOUS WASTE, SOLID, n.o.s.
   X (ACETONE, METHYLENE CHLORIDE) 9, NA3077, III
   003 DM 17900 P F002

9. HAZARDOUS WASTE, SOLID, n.o.s.
   X (METHYLENE CHLORIDE, TOLUENE) 9, NA3077, III
   003 DM 00600 P F002

10. WASTE HAZARDOUS WASTE, SOLID, n.o.s.
    X (ACTIVATED CARBON, ACETONE) 9, NA3077, III
        003 DM 01200 P F002

11. Additional Descriptions for Material Listed Above:
    WATER, SOLVENTS L/T
    RAGS, PPE, SOLVENT S/T
    (METHYLENE CHLORIDE, TOLUENE)
    (METHYLENE CHLORIDE, TOLUENE)
    SOIL CONTAMINATED W/ACETONE
    CARBON CONTAMINATED W/ACETONE
    METHYLENE CHLORIDE, ETC S/T
    METHYLENE CHLORIDE, ETC S/T

12. PACKAGING SLIPS ATTACHED FOR CLARIFICATION
    EMERGENCY CONTACT: 1-800-424-9300

13. GENERATOR'S CERTIFICATION: The above information is correct and complete. No hazardous waste was added, removed or lost, and the hazardous waste identified above was properly removed from the off-site transfer.

14. Inspected: Carmen Veneziale
    Date: 10-29-92

15. Inspected: Thomas R. Lane
    Date: 10-29-92

16. Inspected: Gerald J. Devlin
    Date: 10-29-92

17. Governor's Signature
    Date: 11-06-92
# AETC.
## Advanced Environmental Technology Corporation

### Field Services

#### Shipping/Receiving

- **Company:** Willow Grove NAS
- **Address:** RT 611
- **City/State:** Willow Grove, PA 19090-5110
- **Destination:** AETC (UJ)
- **Transporter:** ETC
- **Placard:** None

<table>
<thead>
<tr>
<th>UNITS</th>
<th>CONTAINER SIZE</th>
<th>NET WEIGHT</th>
<th>DISPOSAL CODE</th>
<th>AETC PRODUCT CODE</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1</td>
<td>55 x 40 ft</td>
<td>400</td>
<td>SHEET85</td>
<td>WATER, SEWAGE</td>
<td>WATER, SEWAGE</td>
</tr>
<tr>
<td>1</td>
<td>55 x 40 ft</td>
<td>400</td>
<td>SHEET85</td>
<td>SF-5, H2O</td>
<td>SF-5, H2O</td>
</tr>
<tr>
<td>3</td>
<td>55 x 40 ft</td>
<td>1200</td>
<td>SHEET85</td>
<td>ACTIVATED CARBON</td>
<td>ACTIVATED CARBON</td>
</tr>
<tr>
<td>3</td>
<td>55 x 40 ft</td>
<td>600</td>
<td>SHEET85</td>
<td>PP, CONTAINMENT</td>
<td>PP, CONTAINMENT</td>
</tr>
<tr>
<td>1</td>
<td>55 x 40 ft</td>
<td>500</td>
<td>NOCJ17741</td>
<td>SOIL W/contaminant</td>
<td>SOIL W/contaminant</td>
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<tr>
<td>3.5</td>
<td>55 x 40 ft</td>
<td>1750</td>
<td>NOCJ17741</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Bill To:**

- Halliburton NAS Environmental Co.
- 910 Copper Rd.
- GAithersburg, MD 20877-0962

---

<table>
<thead>
<tr>
<th>MANIFEST NUMBER</th>
<th>TA1534104</th>
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#### MATERIALS / EQUIPMENT

<table>
<thead>
<tr>
<th>NAME</th>
<th>TIME IN</th>
<th>TIME OUT</th>
<th>LUNCH</th>
<th>VERMICULITE</th>
<th>SAWDUST</th>
<th>GAL METAL RECOVERY</th>
<th>ENVIROFAX PLASTIC RECOVERY</th>
<th>12A50 FIBER</th>
<th>30 GAL. 21C FIBER</th>
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</thead>
<tbody>
<tr>
<td>T. Law</td>
<td>8:45</td>
<td>7:45</td>
<td></td>
<td>10989</td>
<td>10954</td>
<td>10911</td>
<td>10913</td>
<td>10923</td>
<td>10919</td>
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<tr>
<td>W. Wadd</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Neele</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### MANPOWER

- **RO-CON 21C-90:** 10953
- **RO-CON 21C-110:** 10953

#### EQUIPMENT LEVEL A B C

- **HOURS:**
  - **A:**
  - **B:**
  - **C:**

#### TRAVEL TIME ROUND TRIP:

<table>
<thead>
<tr>
<th>CASE NUMBER</th>
<th>NUMBER OF NIGHTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**COMMENTS:**

- **Also Removed 34 x 55 gal. Empty 174/0 Direct to P. Kelly. Camden W.**

---

*The undersigned having full authority to execute this document on behalf of said company (Generator) confirm that Advanced Environmental Technology Corporation (A.E.T.C) has been contracted to perform waste packaging and/or waste removal services and has receipted, documented, and contracted these services for which they were paid. Therefore as the authorized representative of the contracting company (Generator) I guarantee full and prompt payment to A.E.T.C. for the services rendered.*
# Uniform Hazardous Waste Manifest

## Section 1: Generator Identification
- **Generator's Name and Address:** Willow Grove Naval Air Station RT 611
- **Generator's Phone:** 215-443-6937
- **US EPA ID No.:** PA A 170 00 1 58

## Section 2: Transporter Information
- **Transporter Company Name:** ENVIRON TRANSFER CORP
- **Transporter ID:** NJD 9 9 1 2 9 1 5 8
- **Transporter Phone:** 347-2215

## Section 3: Designated Facility Name and Address
- **Advanced Environmental Technology Corporation:** E Eden Lane, Flanders, NJ 07836

## Section 4: Hazardous Waste Identification
1. **Waste Description:** Hazardous waste, liquid, n.o.s.
   - **Name:** Methylene Chloride, Toluene
   - **NA 0082, III
   - **Identification No.:** 001, 0400, P, F002

2. **Waste Description:** Hazardous waste, solid, n.o.s.
   - **Name:** Acetone, Methylene Chloride
   - **NA 0077, III
   - **Identification No.:** 036, 1790, P, F002

3. **Waste Description:** Hazardous waste, solid, n.o.s.
   - **Name:** Methylene Chloride, Toluene
   - **NA 0077, III
   - **Identification No.:** 003, 0060, P, F002

4. **Waste Description:** Activated Carbon, Acetone
   - **Name:** Carbon Contaminated W/Acetone
   - **Identification No.:** 003, 0120, P, F002

## Section 5: Additional Descriptions
- **Waste Type:** Water, Solvents L/T
- **Soil Contaminated W/Acetone
- **Methylene Chloride, Etc. S/T
- **Rags, PPE, Solvent S/T
- **Methylene Chloride, Etc. S/T

## Section 6: Certification
- **Generator's Certification:**
  - I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name, hazard class, and ID number, according to applicable international and national government regulations.
  - If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the most appropriate method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

## Section 7: Acknowledgment of Receipt
- **Transporter 1 Acknowledgement:**
  - Name: Thomas R. Lacy
  - Signature: 
  - Month Day Year: 11/02/1992

- **Transporter 2 Acknowledgement:**
  - Name: 
  - Signature: 
  - Month Day Year: 

## Section 8: Discrepancy Indication Space
- 

---

**Signature and Information Must Be Legible on All Copies**

---

**TSD Mail to - TSD's State**
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Code</th>
<th>Quantity</th>
<th>Unit</th>
<th>Report No.</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>JET FUEL &amp; WATER L/I</td>
<td></td>
<td>001</td>
<td>DM</td>
<td>00400 P</td>
<td>001</td>
</tr>
</tbody>
</table>

**Packing Slips Attached for Clarification**

**Emergency Contact:** 1-800-424-9300

**Carmen Venezia**

**Thomas A. Kane**

**Gerald T. Devlin**

---

**TSD Mail To:** TSD's State
### ADVANCED ENVIRONMENTAL TECHNOLOGY CORPORATION

**Waste Name:** Liquid waste with trace solvents

**Generator:** Willow Cave L-155

**Address:** Willow Cave, PA

**Shipping Name:** Hazardous waste liquid NOS

**Class:** 9

**Hazard Class:** P117

**Process Generating Waste:** Well Sampling

<table>
<thead>
<tr>
<th>HALOGENS</th>
<th>LAYERS</th>
<th>SOLIDS</th>
<th>ODOR</th>
<th>PHYSICAL STATE</th>
<th>VISCOSITY</th>
<th>HAZARDOUS CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td>Solid</td>
<td>High (syrup)</td>
<td>Reactive</td>
</tr>
<tr>
<td>3.5 - 10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Medium (oil)</td>
<td></td>
</tr>
<tr>
<td>&gt;10%</td>
<td>Multilayered</td>
<td>Suspended</td>
<td></td>
<td>Flowable</td>
<td>Low (water)</td>
<td></td>
</tr>
<tr>
<td>&gt;30%</td>
<td>Single Phase</td>
<td>Dissolved</td>
<td>Mild</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PH:**
- < 2
- 2.5
- 6
- 12.5
- 12.5
- >12.5
- Exact

**Specific Grav.:**
- < 1
- 1.2
- Exact

**Flash Point (F):**
- >80
- 80 - 100
- 101 - 140
- 141 - 200
- 201 - 260
- Exact

**Stability:**

**Ash:**

**Water Solubility:**

**Chemical Composition:**

- Name: Water
- Trace solvents including methylene chloride, tetrachloroethylene, and perchloroethylene
- Solid (solids)

**Annual Report Information:**

<table>
<thead>
<tr>
<th>SIC Code</th>
<th>Source</th>
<th>Form</th>
<th>Origin</th>
<th>System Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>2819</td>
<td>457</td>
<td>B307</td>
<td>9506</td>
<td>9399</td>
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</tbody>
</table>

**Present Container:**

- Type/Size: 17H
- Other:

**Shipping Container:**

- Type/Size: 17H
- Other:

**Anticipated Volume:** 10 g

**Additional Information:**

**Certification:**

I hereby certify that I have personally examined and am familiar with the information submitted in this and all attached documents. Based on my inquiry of those closest to the activity responsible for operating the equipment, I believe that the submitted information is true, accurate, and complete to the best of my knowledge and ability and that all known and suspected hazards have been disclosed.

**Signature:**

**Date:** 10-20-93

**Reference:** HAZARDOUS WASTE HANDLER

**Person:** CARMEN VENEZIALE

**Title:** 248741
Advanced Environmental Technology Corporation
Waste Information Profile: 1986 AETC

Waste Name: Jet Fuel (JP-5)
Generator Name: Willow Grove, NASA

Address: Willow Grove, PA

Units: PROD, CS, PC

Shipping Name: Combustible Liquid, NOS
Hazard Class: Combustible Liquid, PG3

Process Generating Waste

Halogens
- 2-5%
- 5-10%
- 10-30%
- >30%

Layers
- Multilayered
- Single Phase

Solids
- Suspended
- Settled
- Dissolved

Odor: None, Mild

Physical State
- Solid
- Flowable
- Semisolid
- Powder
- Liquid
- Purable
- Gas
- Semisolid

Color: Exact

PH
- <2
- 2.5
- 3.5-9
- 9.125
- 12.5
- Exact

Specific Grav.
- <0.8
- 0.8-1.0
- 1.0-1.2
- >1.2
- Exact

Flash Point (F)
- <30
- 30-100
- 100-141
- 141-200
- >200
- No Flash
- Exact

Asphalt
- Peat
- Water
- Solubility

Toxicity Characteristics
- Total (%)
- Total (PPM)
- TCLP (mg/L)

Chemical Composition

Name: Jet Fuel (JP-5)

Water

Annual Report Information

SIC Code: 4999
Source: 37
Form: 607
Origin: 1
System Type: 401

Present Container (Size/Type)
- 17 H
- 17E
- 6D

Shipping Container (Size/Type)
- 17 H
- 17E
- 6D

Anticipated Volume: 1555 gallons

Additional Information:

Certification

I hereby certify that I have personally examined and am familiar with the information submitted in this and all attached documents. Based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete to the best of my knowledge and ability. No known or suspected hazards have been disclosed.

Carmen Venticinque

Date: 10/29/72
Phone: 843-69-30

AETC USE ONLY
Disp Code: 58K238045
**Hazardous Waste Solid, No. 5**

**Shipping Name:** Hazardous Waste Solid, No. 5

**HAZARD CLASS:** 9 PG III

**PH:** 7-8

**SPECIFIC GRAV.:** 1.0-1.2

**FLASH POINT (°F):** >12

**ODOR:** Strong

**TOXICITY CHARACTERISTICS (AND OTHER METALS AND ORGANICS):**

<table>
<thead>
<tr>
<th>CONTAMINANT</th>
<th>CONC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ND</td>
<td></td>
</tr>
</tbody>
</table>

**Hazardous Characteristics:**
- **Viscosity:** Not specified
- **Reactivity:** Not applicable
- **Explosive:** Not applicable
- **Flammable Solid:** Not applicable
- **Other:** Not applicable

**Chemical Composition:**

<table>
<thead>
<tr>
<th>Name: Activated Carbon</th>
<th>Account for 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contaminated with trace solvents, methylene chloride, acetone, toluene, xylenes</td>
<td>95-106</td>
</tr>
<tr>
<td>Water</td>
<td>4-5%</td>
</tr>
</tbody>
</table>

**Annual Report Information:**

<table>
<thead>
<tr>
<th>SIC Code</th>
<th>9999</th>
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<td>Source</td>
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<tr>
<td>Form</td>
<td>4404</td>
</tr>
<tr>
<td>Origin</td>
<td>1 043</td>
</tr>
</tbody>
</table>

**Present Container (Type/Size):**
- 17 L

**Shipping Container (Type/Size):**
- 17 L

**Anticipated Volume:** 3 x 55 gallons

**Additional Information:**

**Certification:**

I hereby certify that I have personally examined and am familiar with the information submitted in this and all attached documents. Based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete to the best of my knowledge and ability and that all losses and sublated hazards have been disclosed.

**Signature:**

**Print Name:** Carmen Veneziule

**Title:** HAZ/Waste Handler
**WASTE NAME:** Soil

**GENERATOR NAME:** Willow Grove Naval Station

**ADDRESS:** Willow Grove, PA 19090-5000

**SHIPPING NAME:** Hazardous Waste Solid N.O.S.

**PROCESS GENERATING WASTE:** Well cuttings

**PH:**
- 4.2
- 4.5
- 4.9
- 4.125
- 4.125
- EXACT

**SPECIFIC GRAV.:**
- 0-0.8
- 0.8-1.0
- 1.0
- 1.0-1.2
- 1.2
- EXACT

**FLASH POINT (°F):**
- < 80
- 80-100
- 101-140
- 141-200
- > 200
- NO FLASH

**COLOR:**
- EXACT

**Halogens:**
- 42%
- 2-10%
- 10-30%
- 30%
- EXACT

**Layers:**
- MULTILAYERED
- BI-LAYERED
- SIMPLE PHASE

**Solids:**
- SUSPENDED
- SETTLEABLE
- DISSOLVED

**Odor:**
- None
- Mild
- Strong

**Physical State:**
- Solid
- Semi Solid
- Powder
- Liquid
- Pumppable
- Gas
- Semisolid

**Viscosity:**
- High (syrup)
- Medium (oil)
- Low (water)

**Hazardous Characteristics:**
- Reactive
- Specifying
- Non-Hazardous

**Chemical Composition:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Account For 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil</td>
<td>100%</td>
</tr>
<tr>
<td>Contaminated with trace solvent, methyl chloride, methylene chloride, ethylbenzene, toluene</td>
<td></td>
</tr>
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</table>

**Annual Report Information:**

<table>
<thead>
<tr>
<th>SIC Code</th>
<th>9 9 9 9</th>
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<td>6 3 5 1</td>
</tr>
<tr>
<td>Origin</td>
<td>1 3 2</td>
</tr>
</tbody>
</table>

**Present Container (Type/Size):**
- 17H
- 17T
- 6D
- FIBER DR.
- BOX
- OTHER

**Shipping Container (Type/Size):**
- 17H
- 17T
- 6D
- FIBER DR.
- BOX
- OTHER

**Approved Volume:** 74

**Additional Information:**

**Certification:**

I hereby certify that I have personally examined and am familiar with the information submitted in this and all attached documents. Based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete to the best of my knowledge and ability and that all known and suspected hazards have been disclosed.

**Signature:**

X Carmen Venegas

**Title:** HAZ/WASTE Handler

**W-19**

**Date:**

10-29-92

**Haz/Res:**

443 9 9 30 150417
**UNIFORM HAZARDOUS WASTE MANIFEST**

**Generation Name: Willow Grove Naval Air Station RT 611**

**Address:** Willow Grove, PA 19090

**Company:** Environ Transfer Corp

**Contact Person:** NJDEP\# 6321-41290/PAAH0095

**Trans. Phone:** 201-347-2215

**Trans. No:** Same

**CONTAINER:** D001 (Jet Fuel (JP-5))

**COMBUSTIBLE LIQUID, N.O.S.**

**Container No:** 001 DM 00400 P

**Waste No:** D001

**Handling Codes for Waste Listed Above:**

**Special Handling Instructions and Additional Information:**

**Emergency Contact:** 1-800-424-9300

**CARMEN VENEZIALE. Carmen Venezia. 10/29/92**

**Transporter:**

**Acknowledgement of Receipt of Materials:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomas R. Lang</td>
<td>[Signature]</td>
</tr>
</tbody>
</table>

**Discrepancy Indication Space:**

1. TDS MAIL TO - TDS'S STATE
TREATMENT STORAGE DISPOSAL FACILITY
Authorization Form

PART ONE: FACT SHEET

Section I.  GENERAL INFORMATION

Facility Name:  ThermalKEM, Inc.
EPA ID Number:  SCD 044 442 333
Address:  P.O. Box 2664 CRS/Rock Hill, SC 29731
Telephone Number:  (803) 324-5310
Parent Company:  American NuKEM (Paramus, NJ)

Section II.  SITE HISTORY

Previous Owner(s):  Industrial Chemical (until 1983)
Previous Use:  Solvent Recycling, Waste Incinerator

Section III.  OPERATIONS

General Facility Description:  ThermalKEM operations consist of drum processing and incineration for a broad range of hazardous and non-hazardous waste. Also operates a non-commercial wastewater treatment plant.
Community Relations: Generally good. At least two environmental coalitions exist in Rock Hill, SC in opposition to a planned second incinerator and other facility expansion.

<table>
<thead>
<tr>
<th>Permits/Licenses</th>
<th>Agency</th>
<th>Permit Number</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air</td>
<td>SCDHEC</td>
<td>2440-0042</td>
<td>8/30/93</td>
</tr>
<tr>
<td>Water</td>
<td>NPDES S.C. Dept. of Health &amp; Environmental Control: SC0024112; Indefinite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td>USEPA; SCD044442333; 6/29/98</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(&quot;Part B&quot;)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>City of Rock Hill Sewer Authority 6/30/91 (Permit 860401)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Updated permit expanding capacity is being sent)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Authorities Having Jurisdiction: SCDHEC, USEPA

Region IV

INSPECTION SCHEDULE

<table>
<thead>
<tr>
<th>Agency</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCDHEC</td>
<td>Monthly</td>
</tr>
<tr>
<td>USEPA/DHEC Jointly</td>
<td>Quarterly</td>
</tr>
<tr>
<td>City of Rock Hill</td>
<td>Bi-weekly</td>
</tr>
</tbody>
</table>
PART ONE: FACT SHEET

Section I. GENERAL INFORMATION

Facility Name: CWM Resource Recovery, Inc.
EPA ID Number: OHD 093 945 293
Address: 4301 Infirmary Road,
West Carrollton, OH 45449
Telephone Number: (513) 859-6101
Parent Company: Waste Management, Inc.

Section II. SITE HISTORY

Previous Owner(s): Messrs. Robert & Anthony Kohnen
Previous Use: Undeveloped farmland.
Solvent Recovery (1978)
Description: CWM purchased site in 1982. Kohnen operated site for CWM until 1/86.

Section III. OPERATIONS

General Facility Description: CWMRR operations include a fuel blending and solvent recovery facility.
Facility Size: The 11.5 acre site contains a processing area, storage facility, process boilers, laboratory and offices.
### Section IV. REGULATORY (cont.)

<table>
<thead>
<tr>
<th>Permits/Licenses</th>
<th>Agency</th>
<th>Permit Number</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air</td>
<td>Ohio EPA</td>
<td>0857751346</td>
<td>Various</td>
</tr>
<tr>
<td>Water</td>
<td>NONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td>EPA</td>
<td>OHD 093 945 293</td>
<td>7/17/94</td>
</tr>
<tr>
<td>Other</td>
<td>Ohio Hazardous Waste Facility Approval Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Permit issued</td>
<td>11/25/81</td>
<td></td>
</tr>
</tbody>
</table>

Other Authorities Having Jurisdiction: NONE

### INSPECTION SCHEDULE

<table>
<thead>
<tr>
<th>Agency</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>USEPA</td>
<td>Semiannually</td>
</tr>
<tr>
<td>OEPA</td>
<td>Semiannually</td>
</tr>
</tbody>
</table>
PART ONE: FACT SHEET

Section I. GENERAL INFORMATION

Facility Name: CWM Chemical Services, Inc.

EPA ID Number: NYD 049 836 679

Address: 1550 Balmer Rd., Model City, NY 14107

Telephone Number: (716) 754-8231

Parent Company: Waste Management, Inc.

Section II. SITE HISTORY

Previous Owner(s): Various govt. agencies pre-1972;

ChemTrol Pollution Service 1972;

SCA (1973-1984)

Previous Use: Offices and TNT production (pre-1972)

Chemical Landfill (1972+)


Section III. OPERATIONS

General Facility Description: CWM operations consist of a Secure Chemical Landfill, commercial wastewater Treatment Plant, PCB transformer drain and flush services and fuel blending.
Section IV. REGULATORY (cont.)

Community Relations: Good, recently improving. CWM is actively promoting the good neighbor image.

Permits/Licenses

<table>
<thead>
<tr>
<th>Permits/Licenses</th>
<th>Agency</th>
<th>Permit Number</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>NYDEC (Discharge Permit): NY - 0072061</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1/01/92</td>
</tr>
<tr>
<td>Solid</td>
<td>NYDEC 90-87-0476</td>
<td>7/31/94</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>USEPA - TSCA (approval letter) None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>Permitted waste hauler in 27 states</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Authorities Having Jurisdiction: Niagara and Canadian River Authorities for water discharge. USEPA Region II for HSWA Regulations.

INSPECTION SCHEDULE

<table>
<thead>
<tr>
<th>Agency</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYDEC</td>
<td>3 inspectors on-site full time</td>
</tr>
<tr>
<td>USEPA</td>
<td>Semi-annually</td>
</tr>
</tbody>
</table>

ATTACHMENT E

AETC MANIFEST CORRESPONDENCE
December 11, 1992

Mr. Don Blackert
HALLIBURTON NUS Environmental Corp.
661 Andersen Drive
Pittsburgh, PA 15220

Dear Don:

Enclosed please find information on each of the disposal facilities that was utilized for the disposal of the material at Willow Grove NAS. Listed below are the specific waste streams and their disposal option:

- 3 Drums of PPE & Debris - ThermalKEM, Inc.
- 3 Drums of Activated Carbon - ThermalKEM, Inc.
- 36 Drums of Soil - CWM-Model City
- 1 Drum of Mixed Oil - CWM-SRR
- 1 Drum of Solvent & Water - CWM-SRR

I've also requested, from our regulatory department, that a Certificate of Tracking be forwarded as soon as all the material has reached its final destination.

If you have additional questions, please feel free to contact me.

Sincerely,

Karen Ockford
Technical Sales Representative
ATTACHMENT F

SITE LOG BOOK
10-29-92

Weather: clear, overcast, 75°F.

0738 US arrives at NAS Willow Grove, obtain pass at front gate.

0840 AETC personnel arrive at front gate, obtain passes.
Met with Bob Nocentini, AETC, passes obtained - move to Pratt Road Compound.

0850 Arrive at Pratt Road Compound, gate has been opened.

Photo R.P. taken by KE at 0852, view of ATE storage area (Prep. for TCE)

Facing South:

0933 AETC personnel begin inventory of site to be removed from site.

AETC personnel: Bob Nocentini, Matt Ward, Tom Long

Signature: [illegible]
Date: 10-29-92

Witness: [illegible]
Date: [illegible]
Note:

Bob Nekentino of AETC has stated that all of the drums located at ACF Road will not be removed. The drums will be removed and placed in one of the storage areas. The reason being, they have shown no contamination.

NASC.92. Several of the drums appear to be slightly damaged and or have faulty lock rings. These drums will be overpacked.

Each of the drums to be removed will need to be opened to verify contents.

All drums which are observed to contain any air space will be filled with vermiculite to comply with landfill regulations. Also areas of heavy rust or mud stains will be sprayed with paint.

* Drums designated NFW-10 will stay. Only 3 have been located.

**Photo R.P.s taken by US at 0911.**
**View of AETC personnel initial activities.**
**Facing south.**

0902. AETC personnel begin unloading equipment and overpacks to begin removal. Drums being opened to verify contents.

0915. AETC personnel continue drum inventory. 1st carbon drum opened - pipes fittings removed. This activated carbon drum will be overpacked.

**Photo R.P.s taken by US at 0927.**
**View of 1st drum (activated carbon drum) being overpacked.**
**Facing south.**

0930. 1st drum overpacked. Carbon loaded onto truck.

**Photo R.P.s taken by US at 0940.**
**View of AETC topping off partially full drums.**
**Facing southeast.**

**Photo R.P.s taken by US at 0942.**
**View of damaged drum.**
**Facing southeast.**
Photo R1 taken by US at 0930
View of drums being overpacked
Facing southeast

1015 AEK continues opening drums, top off drums, etc.

R1 taken by US at 1018
View of removal activities
Facing south

1036 All drums containing soils (sodium) are being designated on outside of drum as
MCL 18743. This number is a disposal code.

R1 taken by US at 1039
View of drum with disposal code number US
Facing southwest

1050 Commander Mike Hendrix arrives and discusses on-site activities with US and Bob
Nocontino. Approximately 35 empty drums are also located at the site and AFTE person
will be removing these drums.
1057. Commander, Shand leaves site.
AETC personnel continue outside activities.
All activated carbon drums are being labeled with the following WIP:
- WIP# 150780
- ST- 56170
These are disposal codes.
The drums containing PPE are being labeled with the following disposal code:
- ST-85364

1110. 2 drums have been identified which contain liquid. (We were handling specs state only 1 drum.)
Bob Detente called his office and received info on how to manifest and label this drum.
For disposal, Bob stated that copies of all manifests generated at the site will be
given to NS at the end of the day. These manifests will give breakdown as to number
of drums shipped and specify type of material in each drum.
RIP, taken by NS at 1115.
View of AETC personnel completing computer
generated manifests.
Facing Southwest.
11501 ATEC continuing drum loading activities, manifesting, etc.

Note: Total of 36 soil (solid) drums have been identified. - (Weigh loading spoons show 341 total)

of the 2 liquid containing drums identified - 1 contains colored oil phase layer, this drum has been labeled with waste disposal code *SRRK_28089.

The 2nd drum was observed to contain about 99% water and 1% soil - thus drum has been labeled with waste disposal code *SRRJ_57285.

B: Photo taken by VS at 1158
View of liquid containing drums and associated waste disposal codes.
Facing south.

1230 majority of manifests and drum loading complete. ATEC began loading drums onto truck.
The Navy has supplied fork lift to assist ATEC personnel in loading drums onto truck.
1418  Final drum loaded onto truck. Drums to remain at site. (3 unit + empty) moved to central location at storage area.

1425  Ripit taken by VS at 1425. View of drum storage area (post-removal) facing south.

1425  AETC personnel loading equipment onto truck - Navy forklift leaves site.

1430  AETC personnel + VS leave Plant/Plant Compound - move to Building #75 to have Navy Personnel sign manifests.

1435  Carmen Veneziale of Navy is signing the manifests. (Leads, Hazardous Waste Handle for Navy.

44 drums total were loaded onto truck. They included:

36 Solids (2 in overpack) 
3 PPE 
3 Activated Carbon (in overpacks) 
1 - IP-5 + Water 
1 - Solvent + Water
Also, 34 empty drums were removed
from the site by AETK.

14S3 - Manifests have been signed.
Carmen is making copies of manifests
for US. - VS previous manifest copies.

1500 AETK personnel + US leave site.
US returning to HOS office.
ATTACHMENT G

PHOTOGRAPHIC LOG
PHOTOGRAPHS LOG

Photo 1
View of drum Storage Area (Pre-removal) facing south 10-29-92 at 0852 hours.

Photo 2
View of AETC personnel - Initial activities facing south 10-29-92 at 0911 hours

Photo 3
View of first drum being overpacked facing southeast 10-29-92 at 0927 hours

Photo 4
View of AETC topping-off partially full drums facing southeast 10-29-92 at 0940 hours

Photo 5
View of damaged drum facing southeast 10-29-92 at 0942 hours

Photo 6
View of drums being overpacked 10-29-92 at 0950 hours

Photo 7
View of removal activities facing south 10-29-92 at 1018 hours

Photo 8
View of drums with disposal code numbers facing southwest 10-29-92 at 1039 hours

Photo 9
View of AETC personnel completing computer generated manifests facing southeast - 10-29-92 at 115 hours

Photo 10
View of liquid containing drums and associated disposal codes facing south 10-29-92 at 1158 hours

Photo 11
View of completely labeled and manifested drum facing north 10-29-92 at 1231 hours
### Photo 12
View of drum loading activities with Navy folk lift facing southeast
10-29-92 at 1234 hours

### Photo 13
View of drum loading with Navy forklift
10-29-92 at 1245 hours

### Photo 14
View of drum loading with Navy forklift facing southeast
10-29-92 at 1238 hours

### Photo 15
View of drum manifest
10-29-92 at 1245 hours

### Photo 16
View of final drum being overpacked facing south
10-29-92 at 1425 hours