

# Camp Minden M6 Destruction

## Attachment E

Environmental Protection Agency's (EPA) June 8,  
2015 Final Determination for these Applicable,  
Relevant, and Appropriate Requirements (ARARS  
for the Camp Minden Superfund Removal Site (Site)  
and attached Environmental and Compliance  
Considerations



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733

June 8, 2015

Owen W. Monconduit  
Brigadier General (Ret)  
Louisiana Military Department  
Deputy Director, Contracting & Purchasing  
6400 St. Claude Avenue  
Jackson Barracks  
New Orleans, LA 70117

Dear Brigadier General (Ret) Monconduit,

This letter corrects and replaces the June 5, 2015, letter and documents the Environmental Protection Agency's (EPA) final determination for these Applicable, Relevant, and Appropriate Requirements (ARAR) for the Camp Minden Superfund Removal Site (site).

During the regular operations, the Louisiana Military Department will: (a) continuously measure carbon monoxide (CO), Total Hydrocarbon (THC), nitrogen oxides (NO<sub>x</sub>) and oxygen in the stack using CEMS, (b) continuously measure stack gas flow rate in the stack; (c) continuously measure combustion air supplied to the after burner; and (d) measure all other operating parameters established during the performance test.

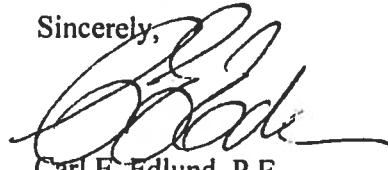
- A. During the regular operations, the LMD will meet the following emissions standards:
- Carbon monoxide 20 ppm<sub>dv</sub> or less at the stack gas conditions;
  - Total hydrocarbon 3 ppm<sub>dv</sub> or less at the stack gas conditions, if oxygen is more than 17% in the stack;
  - Total hydrocarbon 10 ppm<sub>dv</sub> or less, corrected to 7% oxygen, if oxygen is 17% or less in the stack;
  - NO<sub>x</sub> limit of 250 ppm<sub>dv</sub> at the stack gas condition; and demonstrate that this limit will meet hourly and annual National Ambient Air Quality Standards for NO<sub>x</sub>.
- B. Sampling will be conducted to demonstrate compliance: (a) quarterly for 99.99% DRE, and (b) semi-annual for dioxins/furans standards. The following requirements were previously transmitted to you via email:
- Initial Acceptance Testing of the Contained Burning System – LMD will continuously monitor at the stack for CO, Total Hydrocarbons, NO<sub>x</sub>, O<sub>2</sub>, and stack gas flow rate. LMD will also sample for volatiles, semi-volatiles (which include dinitrotoluene, dibutylphthalate, and diphenylamine), particulate and dioxins/furans.
  - Continuous Monitoring of the Contained Burning System after the completion of the Acceptance Testing – LMD will continuously monitor at the stack for CO, Total Hydrocarbons, NO<sub>x</sub>, O<sub>2</sub> and stack gas flow rate.
  - Periodic Sampling of the Contained Burning System after the completion of the Acceptance Testing – LMD will sample from the stack every three months for volatiles and semi-volatiles (which include dinitrotoluene, dibutylphthalate, and diphenylamine). LMD will use the sampling results to calculate and demonstrate compliance with the Destruction and Removal Efficiency.

- C. In addition, during the performance test, LMD will establish operating conditions limits for minimum temperatures in the combustion zones, maximum waste feed rate, stack gas flow rate, combustion air flow rate to afterburner, and all other parameters in the combustion system (including the pollution abatement system) that would affect both the stack emissions, and Destruction and Removal Efficiency (DRE). For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values (except for THC, CO and NOx measurements noted in paragraph A above) will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
- D. The AOC requires EPA to provide an independent review and approval of all Work, or any waiver from a standard that is required. Paragraph 96 in the AOC requires EPA to issue a Notice of Completion of Work after EPA determines the Work has been fully performed in accordance with the AOC. As such, the approval language in the attached list of ARARs has been corrected (Items 20, 26, 36, and any other similar language).
- E. In item 78, the word "incinerated" has been replaced by "destroyed."

Please see the attached ARARs document you submitted to the Agency on June 4, 2015, with revisions in Red.

We look forward to continuing our work with the State of Louisiana to complete the on-site destruction of materials at Camp Minden. If you have any questions, please contact Greg Fife at (214) 665-6773.

Sincerely,



Carl E. Edlund, P.E.  
Director  
Superfund Division

Enclosure

cc: LDEQ

**Attachment E**  
**Environmental and Compliance Considerations**

**All work to be performed will be subject to all applicable EPA, OSHA, LDEQ, DPS, Military Department, state and federal laws, regulations, policies, permits, licensing requirements, and guidance. This document is not an inclusive list. Work may be governed by additional regulations, guidance, policies or laws. Applicable requirements may be dependent upon the unit design and operations.**

1. This removal action will be conducted to eliminate the actual or potential release of hazardous substances, pollutants, or contaminants to the environment, pursuant to CERCLA, 42 U.S.C. §9601 et seq., and in a manner consistent with the National Contingency Plan (NCP), 40 CFR Part 300, as required at 33 U.S.C. §1321(c)(2) and 42 U.S.C. §9605. Pursuant to 40 CFR Part 300.415(j), fund-financed removal actions under CERCLA §104 and removal actions pursuant to CERCLA §106 shall, to the extent practicable considering the exigencies of the situation, attain the applicable or relevant and appropriate requirements under Federal and State environmental laws. Site-specific ARARs and to-be-considered (TBCs) for this site include: 40 C.F.R. Part 264, Subpart X operations, maintenance, monitoring, performance, closure and post-closure requirements; 40 C.F.R. Part 264 Subpart EE storage, and 40 C.F.R. § 265.382; explosives storage handling, and disposal procedures listed in Military Explosives, Department of the Army Technical Manual, Handbook on the Management of Munitions Response Actions; EPA OSWER, Interim Final; Ammunition Handbook: Tactics, Techniques, and Procedures for Munitions Handlers; Department of the Army, Prediction of Safe Life of Propellants, Picatinny Arsenal; Reports of Explosives Safety Assistance Visits (March and April 2013), Department of the Army Explosives Safety Board; and the Louisiana Administrative Code, Title 55, Part I, Chapter 15 – Explosives Code.
2. Should the response action generate hazardous waste residues requiring off-site disposal, the RCRA waste analysis requirements found at 40 C.F.R. §§ 261.20 and 261.30; the RCRA manifesting requirements found at 40 C.F.R. §§ 262.20; and the RCRA packaging and labeling requirements found at 40 C.F.R. §§ 262.30, shall be appropriate for this action. All off-site transportation of hazardous waste will be performed in conformity with RCRA and U.S. Department of Transportation requirements. See generally 40 C.F.R. Part 263. All hazardous substances removed for off-site disposal shall be disposed at a facility in compliance with environmental laws and regulations, as determined by LDEQ and EPA, under 40 C.F.R. §§ 300.440 and LAC 33:V.Subpart 1(Hazardous Waste Regulations) and LAC 33:VII (Solid Waste Regulations).
3. All sampling and analytical methods to be used must be specified and any contract laboratory used to analyze the residues must be LELAP-certified per LAC 33:I.Subpart 3.
4. Shipping manifest for off-site shipments of any waste will be prepared and signed by Respondent or their authorized agent.
5. Work shall be in compliance with site specific ARARs (Table 3 of this document). These ARAR's were developed utilizing applicable requirements for a miscellaneous unit, but in order to provide proper operating parameters, some components of the 40 CFR Part 63, Subpart EEE Maximum Achievable Control Technology Standards (MACT) and State regulations under LAC 33:III were incorporated. The federal and state regulations have requirements associated with components such as pollutant control devices. As such the ARARS listed in Table 3 have been assigned generic descriptive names to clarify with components have specific applicable regulations.

## 6. Air Quality requirements:

Compliance with the Louisiana Ambient Air Quality standards (LAAQS) will be demonstrated. In the event air parameters do not have a LAAQ standard, the screening criteria reverts to National Ambient Air Quality standards (NAAQS). For reference, the ambient air quality standards for the burning of the M6/CBI are listed below in Table 1 and Table 2.

a. Table 1. Toxics

Pollutant	CAS Number	AAS (mg/M <sup>3</sup> )	Avg. Period	MER* (lbs/yr)
2,4 dinitrotoluene	121-14-2	4.76	8-hour	100
2,6-dinitrotoluene	606-20-2	4.76	8-hour	100
Dibutyl phthalate	84-74-2	119.00	8-hour	380
Diphenylamine**	122-39-4	100	1-hour	not specified

\*The Minimum Emission Rate (MER) is based on very conservative modeling done in the early stages of the Air Toxics program. Basically we use it as a check to determine if we need to consider this for modeling. If their TOTAL lbs/yr are lower than the MER than it is assumed that they will have little to no impact on the ambient air.

\*\* EPA and LDEQ do not have an AAS for diphenylamine. The Texas Commission on Environmental Quality AAS for one hour effects screening level was used.

b. Table 2. Criteria Pollutants

Pollutant	Avg. Period	NAAQS limit ( $\mu\text{g}/\text{M}^3$ )
PM <sub>2.5</sub>	24-Hour Period	35
PM <sub>2.5</sub>	Annual	12
PM <sub>10</sub>	24-Hour Period	150
PM <sub>10</sub>	Annual	50
NO <sub>x</sub>	1-hour	188
NO <sub>x</sub>	Annual	100
SO <sub>2</sub>	1-hour	195
SO <sub>2</sub>	3-hour	1300
SO <sub>2</sub>	24-hour	365
SO <sub>2</sub>	Annual	80
CO	1-hour	40,000
CO	8-hour	10,000

#### 7. Post Removal Site Control: Site Cleanup requirements:

As required by LAC 33:V.3507 (Closure Performance Standard). Upon completion of the treatment of all materials, the Respondent must identify and clean up any releases (of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products), to the soils from equipment, handled products, and stored/treated wastes. As a means of satisfying the closure requirements the Respondent may demonstrate an alternative risk-assessment-based closure in accordance with LAC 33:I.Chapter 13 (LA RECAP) Site to be restored to pre-removal action conditions, as per Post Removal Site Control Plan to include, but not limited to:

a. The Respondent will specify the Closure Performance Standard in the Post Removal Site Control Plan. This includes determining the baseline concentration of each expected constituent in soil for later comparison to applicable closure performance standard or alternate risk-assessment-based closure standard (RECAP standards).

b. The Respondent will develop a sampling plan to be followed after treatment activities to determine whether a release has occurred. Necessarily this will involve setting action levels above which will be considered a release and what remedial actions, if any, will be taken in response to a demonstrated release. The Respondent may demonstrate an alternative risk-assessment-based closure standard in accordance with LA RECAP. If the Respondent utilizes the alternative standards in RECAP, he must provide a framework for how the RECAP evaluation will proceed (will it be Screening Option only, or will it progress to Management Option

1, 2, etc). RECAP utilizes look-up tables with values that may or may not be altered by site-specific data. If a constituent is not listed in the tables, propose a surrogate compound with a justification for the substitution.

**Table 3. List of State of Louisiana RCRA/CERCLA/AIR/WATER ARARs for the Removal Action at Camp Minden Systems.**

Item #	Activity	Required/ Applicable	Regulatory Citation	Description
1.	Work to be performed	Required	LAC 33:IX.2501.A.1 LAC 33:IX.2511.A.1.b  OR  40 CFR Part 300 or 33 CFR 153.10.e	Apply for develop and implement a <b>Storm Water Pollution Prevention Plan (SWPPP)</b> for the site. <b>OR</b> Conduct all discharges of process wastewater, process area storm water, and/or uncontaminated storm water from the site according to <b>instructions from the Federal On-Scene Coordinator (FOSC)</b> . (The FOSC specifies the monitoring requirements for discharges of process wastewater, process area storm water, and/or uncontaminated storm water from the site and requires the development and implementation of a <b>SWPPP</b> . NOTE: All discharges should be monitored for the hazardous substances and chemicals at the site and the products and by-products of combustion of those hazardous substances and chemicals burned at the site.)
2.	Work to be performed	Required	LAC 33:III Chapter 7 Ambient Air Quality	As per LAC 33:III.705.A, the standards of ambient air quality listed in LAC 33:III.711.A, Table 1 and 711.B, Table 1a define the limits of air contamination by particulates and gases, above which limits the ambient air is hereby declared to be unacceptable and requires air pollution control measures. Until additional pertinent information becomes available through surveillance and research with respect to the effects of the air contaminants listed in LAC 33:III.711.A, Table 1 and 711.B, Table 1a, the air quality limits listed in LAC 33:III.711.A, Tables 1 and 711.B, Table 1a shall apply in Louisiana. The limits stated include normal background levels of particulates and gases.
3.	Work to be performed	Required	LAC 33:V.Chapter 22 40 CFR Part 264	Permanent <b>on-site disposal</b> of any hazardous materials is prohibited by state and federal regulations
4.	Health and Safety Plan	Required	LAC 33:V.717 40 CFR Part 264	Procedures for <b>public notification</b> to the surrounding community and state and local governments must be provided in the health and safety plan, and adhered to during removal, combustion, and while conducting post removal actions. At a minimum meet the requirements of LAC 33:V.717.
5.	Quality Assurance, Sampling and Data Analysis	Required	LAC 33:I. Chapter 45 (LA Laboratory Accreditation program); LAC 33:I.Chapter 13	Any <b>lab samples</b> must be analyzed by an LA accredited laboratory; all data analysis must meet the QA/QC requirements of EPA SW-846 Methods, and appropriate detection limits for evaluating the closure performance standard.



Item #	Activity	Required/ Applicable	Regulatory Citation	Description
6.	Post-Removal Site Control	Required	LAC 33:I.Chapter 13 (Use of appropriate sample placement and analytical methods.)	The Respondent must conduct confirmatory sampling in order to determine post removal clean up effectiveness. All sample analyses must utilize appropriate EPA – SW-846 methods. All sample placement decisions must be equivalent to the relevant SW-846 Method Chapter 9, and/or RECAP Appendix B.
7.	Post-Removal Site Control	Required	LAC 33:I.Chapter 13 (Use of RECAP required for all CERCLA and RCRA activities in LA)	Samples must be collected for COCs intrinsic to combustion material for post removal site control confirmatory sampling.
8.	Post removal Site Control	Required	LAC 33:V.1103	All <b>residues from</b> the combustion activities, decon activities, must undergo hazardous waste determination classification to ascertain if the residues will have to be managed as RCRA hazardous waste.
9.	Final Report	Required	LAC 33:I.Chapter 13 (Use of RECAP required for all CERCLA and RCRA activities in LA)	<b>Final Reports</b> making determinations of adequacy of post removal must describe the closure performance standard(s), sample results (pre- and post-closure) and final disposition of any and all equipment. All analytical data should meet RECAP detection levels for reporting requirements.
10.	Off-site shipments	Required	LAC 33:V.1103; 1105, 1107; and Chapter 13 Transporter Requirements; 40 CFR Part 264	All <b>off site shipments of any materials</b> must be characterized for RCRA hazardous waste designation; and those materials that are designated as RCRA hazardous waste must be accompanied by a <b>RCRA manifest</b> at all times during transport while off-site.
11.	TD-1 – Thermal Treatment System	Required	[40 CFR 63.1206(b)(11)]	Calculate the waste residence time and include the calculation in the performance test plan under §63.1207(f) and the operating record. The Respondent must also provide the waste residence time in the Documentation of Compliance under §63.1211(c) and the Notification of Compliance under §§63.1207(j) and 63.1210(d). Demonstrate compliance with the appropriate design residence time of the Secondary Chamber limits from these ARARs.
12.	TD-1 – Thermal Treatment System	Required	[40 CFR 63.1206(b)(2)]	Conduct a comprehensive performance test under the requirements of §§63.1207(f)(1) and (g)(1) to document compliance with the affected emission standard(s). Conduct performance testing under representative operating conditions as defined in §63.6(f)(2)(iii)(B) and 63.7(e)(1), by operating in the extreme range of normal conditions. ) If Respondent determines (based on Continuous Emission Monitoring (CEM) recordings, results of analyses of stack samples, or results of Compliance Monitoring System (CMS) performance evaluations) that any emission standard has been exceeded during a comprehensive performance test for a mode of operation, the Respondent must cease thermal treatment operations immediately under that mode of operation. The Respondent must make this determination within 90 days following completion of the performance test.  For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen

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				percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
13.	TD-1 – Thermal Treatment System	Required	[40 CFR 63.1206(c)(4)(i)]	If an emergency safety vent (ESV) [A rupture disc qualifies as an ESV] opens when waste remains in the combustion chamber (i.e., when the waste residence time has not expired) during an event other than a malfunction as defined in the startup, shutdown, and malfunction plan such that combustion gases are not treated as during the most recent comprehensive performance test (e.g., if the combustion gas by-passes any emission control device that was operating during the performance test), the Respondent must document in the operating record whether it remained in compliance with the emission standards of this subpart considering emissions during the ESV opening event.
14.	TD-1 – Thermal Treatment System	Required	[40 CFR 63.1206(c)(4)(ii)]	The Respondent must develop an ESV operating plan, comply with the operating plan, and keep the plan in the operating record. The ESV operating plan must provide detailed procedures for rapidly stopping the waste feed, shutting down the Thermal Treatment System, and maintaining temperature in the combustion chamber during the waste residence time, if feasible. The plan must include calculations and information and data documenting the effectiveness of the plan's procedures for ensuring that combustion chamber temperature is maintained as is reasonably feasible.
15.	TD-1 – Thermal Treatment System	Required	[40 CFR 63.1206(c)(4)(iii)]	After any ESV opening that results in a failure to meet the emission standards, the Respondent must investigate the cause of the ESV opening, take appropriate corrective measures to minimize such future ESV openings, and record the findings and corrective measures in the operating record.
16.	TD-1 – Thermal Treatment System	Required	[40 CFR 63.1206(c)(4)(iv)]	The Respondent must submit to the Administrator a written report within 5 days of an ESV opening that results in failure to meet the emission standards of this subpart to document the result of the investigation and corrective measures taken.
17.	TD-1 – Thermal Treatment System	Required	[40 CFR 63.1206(c)(7)]	Prepare and at all times operate according to an operation and maintenance plan that describes in detail procedures for operation, inspection, maintenance, and corrective measures for all components of the Thermal Treatment System, including associated pollution control equipment, that could affect emissions of regulated hazardous air pollutants.
18.	TD-1 – Thermal Treatment System	Required	[40 CFR 63.1208(b)(1)(i)]	Dioxins and furans (D/F): Determine the amount of emissions using the EPA Test Method 0023A, Sampling Method for Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans emissions from Stationary Sources. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%,

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				the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
19.	TD-1 – Thermal Treatment System	Required	[40 CFR 63.1209(b)(2)(i)]	Calibrate thermocouples at a frequency and in a manner consistent with manufacturer specifications, but no less frequent than once per year. The Respondent must operate and maintain optical pyrometers in accordance with manufacturer specifications unless otherwise approved by the Administrator. The Respondent must calibrate optical pyrometers in accordance with the frequency and procedures recommended by the manufacturer, but no less frequent than once per year.
20.	TD-1 – Thermal Treatment System	Required	[40 CFR 63.1209(j)(3)]	Waste Feed rate $\leq$ TBD lb/hr to the Thermal Treatment System. Specify operating parameters and limits to ensure that good operation of each waste firing system is maintained. The initial design feed rate shall be confirmed during the initial compliance test. Any change to the design feedrate based upon the compliance test shall be approved by EPA.
21.	TD-1 – Thermal Treatment System	Required	[40 CFR 63.1209(j)(3)]	Waste Feed rate monitored by technically sound method at the regulation's specified frequency. Statistical Basis: Hourly maximum
22.	TD-1 – Thermal Treatment System	Required	[40 CFR 63.1219(b)(1)(i)]	Dioxins and furans (D/F) $\leq$ 0.11 ng/dscm for Thermal Treatment System equipped with a dry air pollution control system. A source equipped with a wet air pollution control system followed by a dry air pollution control system is not considered to be a dry air pollution control system, and a source equipped with a dry air pollution control system followed by a wet air pollution control system is considered to be a dry air pollution control system for purposes of this standard. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
23.	TD-1 – Thermal Treatment System	Required	[40 CFR 63.1219(b)(1)(ii)]	Dioxins and furans (D/F) $\leq$ 0.20 ng/dscm for Thermal Treatment System not equipped with a dry air pollution control system. A source equipped with a wet air pollution control system followed by a dry air pollution control system is not considered to be a dry air pollution control system, and a source equipped with a dry air pollution control system followed by a wet air pollution control system is considered to be a dry air pollution control system for purposes of this standard. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen

Item #	Activity	Required/ Applicable	Regulatory Citation	Description
				percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
24.	TD-1 – Thermal Treatment System	Required	[40 CFR 63.1219(b)(7)]	Particulate matter (10 microns or less) (PM10) $\leq$ 0.0016 gr/dscf. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
25.	TD-1 – Thermal Treatment System	Required	[40 CFR 63.1219(c)(1)]	POHC (principal organic hazardous constituent) $\geq$ 99.99 % DRE. The Respondent must calculate DRE for each POHC from the following equation: $DRE = [1 - (Wout / Win)] \times 100\%$ Where: Win = mass feedrate of one POHC in a waste feedstream; and Wout = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.
26.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.D]	Ensure that all Thermal Treatment System are approved by EPA prior to installation. Make suitable application to LDEQ and EPA if planning to install or operate a Thermal Treatment System.
27.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.E] [40 CFR 63.1208(b)(6)]	Determine the amount of SVOC's emitted using the EPA Test Method 0010. (Note: This method is applicable to the determination of Destruction and Removal Efficiency (DRE) of semivolatile Principal Organic Hazardous Compounds (POHCs) from combustion systems.) Laboratory analysis shall determine emissions of 2,4 dinitrotoluene, 2,6-dinitrotoluene, diphenylamine and dibutyl phthalate. [LAC 33:III.2521.E, 40 CFR 63.1208(b)(6)]
28.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.E] [40 CFR 63.1208(b)(6)]	The Respondent shall propose an appropriate method to determine the amount of particulate matter (10 microns or less) emitted using the test methods from 40 CFR 60, Appendix A
29.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.10]	Submit notification: Due to the Office of Environmental Services at least 30 days prior to performing any emissions test, to afford DEQ the opportunity to conduct a pretest conference and to have an observer present.
30.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.11] [40 CFR 63.1206(b)(12)(ii)] [40 CFR 63.1219(d)]	Submit monitoring and test results: Due to the Office of Environmental Services within 60 days of completion of testing. Document compliance with the emission standards based on the arithmetic average of the emission results of each run, except that the Respondent must document compliance with the destruction and removal efficiency standard for each run of the comprehensive performance test individually.

Item #	Activity	Required/ Applicable	Regulatory Citation	Description
31.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.1]	Particulate matter (10 microns or less) (PM10) $\leq$ 0.04 gr/dscf. Note that 40 CFR 63.1219(b)(7) is more stringent. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
32.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.2]	Ensure that all Thermal Treatment System are multi-chambered or equivalent as determined by LDEQ. Equip all multi-chambered Thermal Treatment System with secondary burners.
33.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.2]	For Thermal Treatment System the Secondary Chamber: Temperature $\geq$ 1500 °F for at least 1 second.
34.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.3]	Equip with an interlock that prevents the charge door from opening for 10 minutes after the secondary burner is ignited, or until the secondary chamber exit gases reach 1500 degrees Fahrenheit, whichever occurs first. Install a visual warning system to alert the operator when the interlock system is by-passed for service or cleaning.
35.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.4]	Do not burn or cause or permit the burning of refuse in any installation which was designed for the sole purpose of burning fuel without the authorization of LDEQ.
36.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.5]	Ensure that all Thermal Treatment System are designed with a stack emission point which does not adversely impact the local area air quality. Ensure that all Thermal Treatment System stack heights are approved by EPA. (Approval will be based upon modeling results.)
37.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.6]	Secondary Chamber: Carbon monoxide (CO) monitored by CEM continuously. Measure the carbon monoxide concentration in the exit flue gas.
38.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.6]	Secondary Chamber: Carbon monoxide (CO) recordkeeping by CEM continuously. Record the carbon monoxide concentration in the exit flue gas.
39.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.6]	Secondary Chamber: Oxygen monitored by CEM continuously. Measure the oxygen concentration in the exit flue gas.

Item #	Activity	Required/ Applicable	Regulatory Citation	Description
40.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.6]	Secondary Chamber: Oxygen recordkeeping by CEM continuously. Record the oxygen concentration in the exit flue gas.
41.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.6]	Secondary Chamber: Temperature monitored by temperature monitoring device continuously. Measure the exit flue gas temperature.
42.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.6]	Secondary Chamber: Temperature recordkeeping by recorder continuously. Record the exit flue gas temperature.
43.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.8.b] [40 CFR 63.1219(b)(5)(i)]	Carbon monoxide (CO) $\leq$ 100 ppm <sub>dv</sub> . [LAC 33:III.2521.F.8.b, 40 CFR 63.1219(b)(5)(i)]
44.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.8.c]	Nitrogen oxides (NO <sub>x</sub> ) $\leq$ 250 ppm <sub>dv</sub> .
45.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.8.d]	Flue gas: Excess Oxygen $\geq$ 2 % by volume (dry basis).
46.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.8.e]	Opacity $\leq$ 10 percent.
47.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.F.9]	Conduct emission tests to verify compliance with the standards for the pollutants listed in LAC 33:III.2521.F.9.a , F.9.c and F.9.e using the test methods from 40 CFR 60, Appendix A or other appropriate EPA source.
48.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.G]	Do not cause or permit the handling, use, transport, or storage of any material in a manner which allows or may allow particulate matter, fly ash, etc., to become airborne in amounts that will cause a public nuisance or cause ambient air quality standards to be violated.
49.	TD-1 – Thermal Treatment System	Required	[LAC 33:III.2521.H]	Maintain all equipment, accessories, and appurtenances of a Thermal Treatment System installation in proper working condition and ensure that they are in operation at all times while the Thermal Treatment System is in use.
50.	DF - Exhaust Particulate filtration system	Required	[40 CFR 63.1206(c)(8)(i)(A)]	If the Thermal Treatment System is equipped with a baghouse (fabric filter), the Respondent must continuously operate a bag leak detection system. A fabric filter differential pressure indicator qualifies as a bag leak detection system. Note that the proposed HEPA filter does not qualify as a

Item #	Activity	Required/ Applicable	Regulatory Citation	Description
				baghouse for the purpose of these ARARs.
51.	DF - Exhaust Particulate filtration system	Required	[40 CFR 63.1206(c)(8)(ii)(C)]	The bag leak detection system shall be equipped with an alarm system that will sound an audible alarm when the differential pressure is outside the range established during the initial compliance test and any appropriate vendor recommendation.
52.	DF - Exhaust Particulate filtration system	Required	[40 CFR 63.1206(c)(8)(ii)(D)]	The bag leak detection system shall be installed and operated in a manner consistent with available written guidance from the EPA or, in the absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.
53.	DF - Exhaust Particulate filtration system	Required	[40 CFR 63.1206(c)(8)(ii)(E)]	The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time. Following initial adjustment, the Respondent must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in the operation and maintenance plan. The Respondent must not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365 day period unless such adjustment follows a complete baghouse inspection which demonstrates the baghouse is in good operating condition.
54.	DF - Exhaust Particulate filtration system	Required	[40 CFR 63.1206(c)(8)(iii)(A)]	The Respondent must initiate the procedures used to determine the cause of the alarm or bag leak detection system malfunction within 30 minutes of the time the alarm first sounds.
55.	DF - Exhaust Particulate filtration system	Required	[40 CFR 63.1206(c)(8)(iii)(B)]	The Respondent must alleviate the cause of the alarm or bag leak detection system malfunction by taking the necessary corrective measure(s) which include, but are not to be limited to, the following: (1) Inspecting the baghouse for air leaks, torn or broken filter elements, or any other malfunction that may cause an increase in emissions; (2) Sealing off defective bags or filter media; (3) Replacing defective bags or filter media, or otherwise repairing the control device; (4) Sealing off a defective baghouse compartment; (5) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system; or (6) Shutting down the Thermal Treatment System.
56.	DF - Exhaust Particulate filtration system	Required	[40 CFR 63.1206(c)(8)(iii)]	The operating and maintenance plan must include a corrective measures plan that specifies the procedures the Respondent will follow in the case of a bag leak detection system alarm or malfunction. The corrective measures plan must include, at a minimum, the procedures used to determine and record the time and cause of the alarm or bag leak detection system malfunction in accordance with the requirements of paragraph (c)(8)(iii)(A) of this section as well as the

Item #	Activity	Required/ Applicable	Regulatory Citation	Description
				corrective measures taken to correct the control device or bag leak detection system malfunction or to minimize emissions in accordance with the requirements of paragraph (c)(8)(iii)(B) of this section. Failure to initiate the corrective measures required by this paragraph is failure to ensure compliance with the emission standards in this subpart.
57.	DF - Exhaust Particulate filtration system	Required	[40 CFR 63.1206(c)(8)(iv)]	If the Respondent operates the Thermal Treatment System when the detector response exceeds the alarm set-point or the bag leak detection system is malfunctioning more than 5 percent of the time during any 6-month block time period, the Respondent must submit a notification to the Administrator within 30 days of the end of the 6-month block time period that describes the causes of the exceedances and bag leak detection system malfunctions and the revisions to the design, operation, or maintenance of the Thermal Treatment System, baghouse, or bag leak detection system utilized to minimize exceedances and bag leak detection system malfunctions. Document compliance with this requirement in accordance with 40 CFR 63.1206(c)(8)(iv)(A) through (D).
58.	DF - Exhaust Particulate filtration system	Required, as applicable	[40 CFR 63.1209(k)(1)(i)]	If the Thermal Treatment System is required to comply with a dioxin/furan or Semivolatile metals and low volatility metals emission limit, establish a limit on the maximum temperature of the flue gas at the inlet to the baghouse on an hourly rolling average. Base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
59.	DF - Exhaust Particulate filtration system	Required, if installed	[40 CFR 63.1209(b)(2)(i)]	If required to be installed, calibrate thermocouples at a frequency and in a manner consistent with manufacturer specifications, but no less frequent than once per year. The Respondent must operate and maintain optical pyrometers in accordance with manufacturer specifications unless otherwise approved by the Administrator. The Respondent must calibrate optical pyrometers in accordance with the frequency and procedures recommended by the manufacturer, but no less frequent than once per year.
60.	DF - Exhaust Particulate filtration system	Required, if installed	[40 CFR 63.1209(b)(2)(i)]	If required to be installed, the calibration of thermocouples must be verified at a frequency and in a manner consistent with manufacturer specifications, but no less frequent than once per year.
61.	DF - Exhaust Particulate filtration system	Required, if installed	[40 CFR 63.1209(k)(1)]	Flue gas Temperature $\leq$ TBD F at the inlet to the Baghouse. Base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications. Limit applies only if the unit is subject to a dioxin/furan or Semivolatile metals and low volatility metals emission limit. Statistical Basis: hourly rolling



Item #	Activity	Required/ Applicable	Regulatory Citation	Description
				average.
62.	DF - Exhaust Particulate filtration system	Required, if installed	[40 CFR 63.1209(k)(1)]	If Required, Baghouse Inlet flue gas Temperature monitored by temperature monitoring device continuously. Statistical Basis: hourly rolling average.
63.	DF - Exhaust Particulate filtration system	Required, if installed	[40 CFR 63.1209(k)(1)]	If Required, Baghouse Inlet flue gas Temperature recordkeeping by recorder continuously
64.	DF - Exhaust Particulate filtration system	Required, if installed	[40 CFR 63.1219(b)(7)]	Particulate matter (10 microns or less) (PM10) <= 0.0016 gr/dscf. If a particulate filtration system will be supplied, the vendor must guarantee compliance with this design parameter and verified during the performance testing program. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
65.	DF - Exhaust Particulate filtration system	Required	[LAC 33:III.501.C.6]	Baghouses (including gaskets): Equipment/operational data monitored by technically sound method semiannually or whenever a visible emissions check indicates maintenance may be necessary. Change elements as necessary.
66.	DF - Exhaust Particulate filtration system	Required	[LAC 33:III.501.C.6]	Baghouses: Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of inspection. Keep records of inspections and maintenance activities on site for a period of at least five years and available for inspection by the Office of Environmental Compliance.
67.	DF - Exhaust Particulate filtration system	Required	[LAC 33:III.501.C.6]	Filter vents: Differential Pressure > TBD and < TBD inches w.c.. Filter vent is defined as the structure encasing the baghouse where the differential pressure monitoring system is installed
68.	DF - Exhaust Particulate filtration system - EQT 0003	Required	[LAC 33:III.501.C.6]	Filter vents: Differential Pressure monitored by pressure drop instrument during operation across the filter to determine whether a breach of the filter has occurred. If readings indicate a breach, return the filter to compliance as expeditiously as practicable, but at a maximum within three working days, in accordance with good air pollution control practices for minimizing emissions.
69.	DF - Exhaust Particulate filtration system	Required	[LAC 33:III.501.C.6]	Filter vents: Equipment/operational data recordkeeping by electronic or hard copy during operation. Keep the purchase order or manufacturer certification showing that the installed filters meet the Manufacturer's specification for particulate matter removal efficiency or the filter MERV

Item #	Activity	Required/ Applicable	Regulatory Citation	Description
				rating, as applicable; records of visible emissions checks or differential pressure gauge readings, as applicable; and records of maintenance activities. Keep records on site for a period of at least five years and available for review by the Office of Environmental Compliance.
70.	DF - Exhaust Particulate filtration system	Required	[LAC 33:III.501.C.6]	System stack: Visible emissions monitored by visual inspection/determination once daily during operation. If visible emissions are observed, return the filter(s) to proper operation as expeditiously as practicable, but at a maximum within three working days, in accordance with good air pollution control practices for minimizing emissions.
71.	RLP-1 - Designated release point for monitoring	Required	[40 CFR 63.1209(a)(2)]	Install, calibrate, maintain, and continuously operate all CEMS in compliance with the quality assurance procedures provided in the appendix to this subpart and Performance Specifications 4B (carbon monoxide and oxygen), in appendix B, part 60 of this chapter.
72.	RLP-1 - Designated release point for monitoring	Required	[40 CFR 63.1209(a)(6)(iii)]	Continue monitoring carbon monoxide and oxygen when the waste feed is cutoff if the source is operating. The Respondent must not resume feeding waste if the emission levels exceed the standard.
73.	RLP-1 - Designated release point for monitoring	Required	[40 CFR 63.1209(b)(2)]	Install, calibrate, maintain, and continuously operate the continuous air flow monitor (CMS) in compliance with the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system and the CMS requirements of 40 CFR 63.8(c)(3) and 40 CFR 63.1209(b)(3) through (b)(5).
74.	RLP-1 - Designated release point for monitoring	Required	[40 CFR 63.1209(j)(2)(ii)]	Flue gas: Flow rate $\leq 11,000 \text{ ft}^3/\text{min}$ (nominal). Statistical Basis: hourly rolling average of measurements while the system is operating. Value listed is the design and shall be confirmed or modified based upon the compliance test.
75.	RLP-1 - Designated release point for monitoring	Required	[40 CFR 63.1209(j)(2)]	Comply with the limit on the maximum flue gas flowrate that was determined in the site-specific unit design as an appropriate surrogate for gas residence time.
76.	RLP-1 - Designated release point for monitoring	Required	[LAC 33:III.501.C.6]	Conduct weekly emission tests of NO <sub>x</sub> using hand held portable monitors (approved as listed on LDEQ's web page) to verify compliance with LAC 33:III.2521.F.8.c for nitrogen oxides. If a NO <sub>x</sub> CEMS is installed then this requirement is not required
77.	RLP-1 - Designated release point for monitoring	Required	[LAC 33:III.501.C.6]	PPM values of Nitrogen oxides (NO <sub>x</sub> ) recordkeeping by electronic or hard copy weekly if using hand held monitor, else continuously if using a NO <sub>x</sub> CEMS
78.	Mtls - Testing Requirements for Metal Emissions	Required, if seeking testing waivers	[40 CFR 63.1209(c)(1)]	Prior to feeding the M-6 Propellant and Clean Burning Incendiary (CBI), the Respondent must obtain an analysis of each feedstream that is sufficient to document compliance with the applicable feedrate limits provided by this section. If any material other than the M-6 and CBI is to be destroyed, perform an analysis of those materials also. (May include but not limited to supersack material, cardboard boxes, etc.) The analysis shall determine the chemical composition of the material for the pollutants of concern; which consist of Chlorine, Mercury, Cadmium, Lead, Arsenic,

Item #	Activity	Required/ Applicable	Regulatory Citation	Description
				Beryllium, Chromium, Cobalt, Manganese, and Nickel. Develop and implement a feedstream analysis plan and record it in the operating record. The plan must specify at a minimum the elements specified in 40 CFR 63.1209(c)(2)(i) through (vi).
79.	Mtls - Testing Requirements for Metal Emissions	Applicable, if waiver granted	[40 CFR 63.1209(c)(5)]	Waiver of monitoring of constituents in certain feedstreams. The Respondent is not required to monitor levels of metals or chlorine in the feedstreams to document compliance with the feedrate limits under this section provided that the Respondent documents in the comprehensive performance test plan the expected levels of the constituent in the feedstream and account for those assumed feedrate levels in documenting compliance with feedrate limits: natural gas, process air, and feedstreams from vapor recovery systems.
80.	Mtls - Testing Requirements for Metal Emissions	Applicable, if waiver granted	[LAC 33:III.501.C.6]	Waiver of performance test on a per pollutant basis. Do not conduct performance tests to document compliance with the mercury, semivolatile metals, low volatile metals, or hydrogen chloride/chlorine gas emission standards if the analysis of the feedstream determines (within the parameters of the approved test method) a non-detect of the pollutants of concern. On a per pollutant basis, if pollutants of concern are detected, then proceed to the Waiver of performance test option specified under 40 CFR 63.1206(b)(2).
81.	Mtls - Testing Requirements for Metal Emissions	Applicable, if waiver granted	[40 CFR 63.1207(m)]	Waiver of performance test. Do not conduct performance tests to document compliance with the mercury, semivolatile metals, low volatile metals, or hydrogen chloride/chlorine gas emission standards if meeting the conditions specified in paragraph (m)(1) or (m)(2) of this section. Comply with all requirements of: (m)(1) Emission standards based on exhaust gas flow rate (m)(2) Emission standards based on waste thermal concentration
82.	Mtls - Testing Requirements for Metal Emissions	Required, if waiver not granted	[40 CFR 63.1206(b)(2)]	When not granted a waiver of Performance Testing, conduct a comprehensive performance test under the requirements of §§63.1207(f)(1) and (g)(1) and §1208(b) to document compliance with the affected emission standard(s). Conduct performance testing under representative operating conditions as defined in §63.6(f)(2)(iii)(B) and 63.7(e)(1), by operating in the extreme range of normal conditions. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.

Item #	Activity	Required/ Applicable	Regulatory Citation	Description
83.	Mtls - Testing Requirements for Metal Emissions	Required, if waiver not granted	[40 CFR 63.1208(b)(2)]	If not granted a waiver, conduct emission tests to verify compliance with the standards for the Mercury using Method 29, provided in appendix A, part 60 of this chapter. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
84.	Mtls - Testing Requirements for Metal Emissions	Required, if waiver not granted	[40 CFR 63.1208(b)(3)]	If not granted a waiver, conduct emission tests to verify compliance with the standards for the Cadmium and Lead combined using Method 29, provided in appendix A, part 60 of this chapter. Conduct the performance tests when the particulate matter control device is in steady state operation and a separate set when the particulate matter control device undergoes its normal (or more frequent) cleaning cycle. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
85.	Mtls - Testing Requirements for Metal Emissions	Required, if waiver not granted	[40 CFR 63.1208(b)(4)]	If not granted a waiver, conduct emission tests to verify compliance with the standards for the Arsenic, Beryllium, and Chromium combined using Method 29, provided in appendix A, part 60 of this chapter. Conduct the performance tests when the particulate matter control device is in steady state operation and a separate set when the particulate matter control device undergoes its normal (or more frequent) cleaning cycle. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
86.	Mtls - Testing Requirements for Metal Emissions	Required, if waiver not granted	[40 CFR 63.1208(b)(5)]	If not granted a waiver, conduct emission tests to verify compliance with the standards for the Hydrogen chloride and chlorine gas combined using Method 26A as provided in appendix A, part 60 of this chapter; or Methods 320 or 321 as provided in appendix A, part 63 of this chapter, or ASTM D 6735-01, Standard Test Method for Measurement of Gaseous Chlorides and Fluorides from Mineral Calcining Exhaust Sources - Impinger Method to measure emissions of hydrogen chloride, and Method 26A to measure emissions of chlorine gas, provided that the Respondent follows the provisions in paragraphs (b)(5)(C)(1) through (6) of this section. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be

Item #	Activity	Required/ Applicable	Regulatory Citation	Description
				corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
87.	Mtls - Testing Requirements for Metal Emissions	Required, if waiver not granted	[40 CFR 63.1209(n)]	When a waiver is not granted for all Semivolatile metals and low volatility metals, the Respondent must comply with the semivolatile metal (cadmium and lead) and low volatile metal (arsenic, beryllium, and chromium) emission standards by establishing and complying with the applicable operating parameter limits as specified in 40 CFR 63.1209(n)(1) through (3). The Respondent must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
88.	Mtls - Testing Requirements for Metal Emissions	Required, if waiver not granted	[40 CFR 63.1209(o)]	When a waiver is not granted for Hydrogen chloride and chlorine gas, the Respondent must comply with the hydrogen chloride and chlorine gas emission standard by establishing and complying with the appropriate operating parameter limits as specified in 40 CFR 63.1209(o)(1) through (4). The Respondent must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
89.	Mtls - Testing Requirements for Metal Emissions	Required, if waiver not granted	[40 CFR 63.1219(b)(2)]	When a waiver is not granted; Mercury $\leq 8.1$ $\mu\text{g}/\text{dscm}$ . Statistical Basis: One-hour rolling average. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
90.	Mtls - Testing Requirements for Metal Emissions	Required, if waiver not granted	[40 CFR 63.1219(b)(3)]	When a waiver is not granted; Cadmium and Lead (Pb) $\leq 10$ $\mu\text{g}/\text{dscm}$ combined emissions. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be

Item #	Activity	Required/ Applicable	Regulatory Citation	Description
				corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
91.	Mtls - Testing Requirements for Metal Emissions	Required, if waiver not granted	[40 CFR 63.1219(b)(4)]	When a waiver is not granted; Arsenic, beryllium, and Chromium, Dry Weight $\leq 23 \mu\text{g}/\text{dscm}$ combined emissions. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
92.	Mtls - Testing Requirements for Metal Emissions	Required, if waiver not granted	[40 CFR 63.1219(b)(6)]	When a waiver is not granted; Chlorine Gas and Hydrochloric acid $\leq 21 \text{ ppmv}$ combined emissions, expressed as a chloride ( $\text{Cl}(-)$ ) equivalent. For the purpose of demonstrating compliance with emissions standards during the performance test or regular operations, all emission values will be corrected to 7% oxygen in the stack if the stack gas oxygen is 17% or less (based on measured oxygen percent in stack). If the stack gas oxygen is more than 17%, the above emission values will be calculated at 17% oxygen level, corrected to 7% oxygen in the stack.
93.	M-6 - Disposal process for M-6 Propellant	Required	[40 CFR 63.1208(b)(5)]	Any change in design, operation, or maintenance practices that were documented in the comprehensive performance test plan, Notification of Compliance, or startup, shutdown, and malfunction (SSM) plan that will not adversely affect compliance with the emission standards or operating requirements, must be documented in the operating record upon making such change. The Respondent must revise as necessary the performance test plan, Documentation of Compliance, Notification of Compliance, and SSM plan to reflect these changes.
94.	M-6 - Disposal process for M-6 Propellant	Required	[40 CFR 63.1206(c)(6)]	Establish training programs for all categories of personnel whose activities may reasonably be expected to directly affect emissions of air pollutants from the source. Such persons include, but are not limited to, chief facility operators, control room operators, continuous monitoring system operators, persons that sample and analyze feedstreams, persons that manage and charge feedstreams to the Thermal Treatment System, persons that operate emission control devices, and ash and waste handlers. Each training program shall be of a technical level commensurate with the person's job duties specified in the training manual. Each commensurate training program shall require an examination to be administered by the instructor at the end of the training course. Passing of this test shall be deemed the "certification" for personnel.

Item #	Activity	Required/ Applicable	Regulatory Citation	Description
95.	M-6 - Disposal process for M-6 Propellant	Required	[40 CFR 63.1207(e)(1)(i)]	Submit notification: Due to the Office of Environmental Services at least 90 days prior to performing any emissions test, to afford LDEQ the opportunity to conduct a pretest conference and to have an observer present. Submit site-specific comprehensive performance test( CTP) protocol and CMS performance evaluation test plan. The site -specific (CTP) shall contain all appropriate items specified in 40 CFR 63.1207(f)(1) and the results of the feedstream composition analysis. In addition submit the feedstream analysis plan to the Administrator for review and approval as required by 40 CFR 63.1209(c)(3). The site-specific CTP shall include any relevant waivers of testing allowed per 40 CFR 63.1207(m).
96.	M-6 - Disposal process for M-6 Propellant	Required	[40 CFR 63.1207(e)(2)]	The site-specific test plan and CMS performance evaluation test plan shall be made available to the public for review no later than 60 calendar days before initiation of the test. The Respondent must issue a public notice to all persons as directed by EPA announcing the availability of the test plans and the location where the test plans are available for review. The test plans must be accessible to the public for 60 calendar days, beginning on the date that the public notice is published. The location must be unrestricted and provide access to the public during reasonable hours and provide a means for the public to obtain copies. The notification must include the information specified in 40 CFR 63.1207(e)(2)(i) through (v).
97.	M-6 - Disposal process for M-6 Propellant	Required	[40 CFR 63.1207(j)(1)]	Within 90 days of completion of a comprehensive performance test, the Respondent must postmark a Notification of Compliance documenting compliance with the emission standards and continuous monitoring system requirements, and identifying operating parameter limits under §63.1209, and send it to EPA and LDEQ. Upon postmark of the Notification of Compliance, the Respondent must comply with all operating requirements specified in the Notification of Compliance in lieu of the limits specified in the Documentation of Compliance required under §63.1211(c). If the Respondent fails to postmark a Notification of Compliance by the specified date. Respondent must cease thermal treatment operations immediately. Failure to comply with the operating requirements is failure to ensure compliance with any applicable emission standards of Subpart EEE.
98.	M-6 - Disposal process for M-6 Propellant	Required	[40 CFR 63.1211(a)]	Submit reports in accordance with the table in 40 CFR 63.1211(a).
99.	M-6 - Disposal process for M-6 Propellant	Required	[40 CFR 63.1211(b)]	Record and retain the information as specified in the table in 40 CFR 63.1211(b).
100	M-6 - Disposal process for M-6 Propellant	Required	[LAC 33:III.537]	Comply with the Louisiana General Conditions as set forth in LAC 33:III.537.

1 If the results of the Comprehensive Performance Test reveal applicable concentrations of dioxins or furans, then items 58 through 63 shall be deemed applicable.

2 If this operational analysis is not performed, no waiver for compliance testing and other associated requirements shall be granted.



## Camp Minden M6 Destruction, Attachment F – Detailed Scope of Services

Contractor will deliver the items or services as described below. The services listed in this section are the minimum desired. The Contractor shall identify, comply, and provide any/all additional services in meeting all applicable state and federal regulatory requirements. The Scope of Services are subject to approval by the Project Coordinator and/or the state and federal regulatory agencies and include as a minimum the following:

### Overall

- a. Prior to initiating full operations, Contractor will conduct the required comprehensive performance test/trial disposals to verify air modeling results and air quality standards.
- b. As part of the daily methodology, Contractor should consider means to minimize visible smoke and reduce possible ground contamination.
- c. Invoicing for disposal operations will be based on actual net weighed quantities disposed. Contractor will provide National Type Evaluation Program (NTEP) approved or certified scales for verification of quantities [reference National Institute of Standards and Technology (NIST), Handbook 44 Specifications and Tolerances and Handbook 130 – Uniform Weights and Measures]. Weights and scales will be calibrated in accordance with the Manufacturer's instructions. Contractor will provide weight tickets for verification of invoicing.
- d. Limitations include: acts of God, severe weather days, and lightning strike events that can limit operations enabling the Contractor to submit these days for consideration by the Project Coordinator for additional contract time.
- e. The Contractor shall develop and maintain the disposal prioritization program by conducting periodic assessment of the explosive storage magazines and/or materials listed above in paragraph 2 of this contract and recommend to the State to adjust the prioritization for removal action accordingly.
- f. The Contractor shall verify and provide licensed and experienced personnel to conduct the Work. The Work Plan shall reflect compliance with state and federal statutory, regulatory, or procedural requirements.
- g. With the exception of shipping papers, the movement/transportation of explosive material on Camp Minden must comply with Camp Minden policies and procedures. Any deviations from this requirement will be considered and approved on a case by case basis by the appropriate authority.
- h. The Contractor shall prepare a Spill and Emergency Response Contingency Plan and submit to the State no later than thirty (30) days after award of the contract. The Contractor must implement the plan after approval by the OSC. The following items must be addressed in detail – (1) Response to spills or releases at and/or from the Site to address both the workers on-site and the public exposure, (2) Response analysis for conceivable occurrences (i.e. who and what will respond, alternative communication methods), (3) Call-down list for notification, (4) Coordination mechanism with State and local authorities.
- i. The Contractor shall conduct site clean-up daily around the disposal site/s, explosive magazine storage, and work areas including but not limited to the removal of waste, residual material, equipment, and any other ignitable materials. Contractor shall dispose of all waste associated with the explosives and actions taken including but not limited to

## **Camp Minden M6 Destruction, Attachment F – Detailed Scope of Services**

- bulk (supersacks), cardboard boxes, metal drums, fiber drums, pallets, shrink wrap, ash and any other associated materials.
- j. The Contractor is responsible for determining and providing any unique or special security measures to safeguard materials and equipment to support the removal of the materials listed in paragraph 2 of this contract. Contractor will be provided access keys to all storage magazines from the Project Coordinator and is responsible for maintaining access control.
  - k. The State and the Contractor shall provide continued access for state and federal regulatory agents, representatives, contractors, and other authorities throughout the removal of the materials listed above in paragraph 2 of this contract. State and federal regulatory agents, representatives, contractors, and other authorities physically accessing the work site will be required to adhere and comply with the Contractor's safety and security measures. Access will be required during normal working hours unless arranged for in advance.
  - l. The Contractor shall be responsible for any roads they create in order to accomplish the work.
  - m. Sites available at Camp Minden for consideration is Area I and as stated in the Contractor's quote.
  - n. Unless otherwise provided in the contract, any additional plans, reports, or other deliverables that require EPA approval under the SOS or AOC shall be reviewed and approved by state and federal regulatory agencies.
  - o. Contractor shall comply with all Camp Minden Installation regulations, policies and requirements.
  - p. The Contractor shall acknowledge receipt and maintain a copy of the "Settlement Agreement," and confirm to the Military Department a copy has been provided to each Subcontractor.
  - q. The Contractor shall provide an outline/descriptions of the procedures/methods to be utilized for soil sampling (before and after the removal action), air monitoring/sampling (throughout the removal action), and any necessary water sampling (surface water collection/runoff). The Contractor shall utilize the outline/description referenced above to develop a Quality Assurance Sampling Plan (QASP) and Quality Assurance Project Plan (QAPP). The QASP and QAPP shall be submitted with the final Work Plan by the Contractor.
  - r. The Contractor shall conduct air modeling as required.

### **Work Plan**

- a. The Contractor shall provide within five days (5) after final execution of the contract, a revised formal Work Plan to the State for submittal to state and federal regulatory agencies for approval. The revised formal work plan will be based on any revisions mandated by the State or by state and federal regulatory agencies of the work plan submitted as part of the original quote received on March 18, 2015.

## **Camp Minden M6 Destruction, Attachment F – Detailed Scope of Services**

- b. EPA may approve, disapprove, require revisions to, or modify the submitted Work Plan in whole or in part. If EPA requires revisions, successful Contractor shall submit revised Work Plan within fourteen (14) days after receipt of EPA's notification of the required revisions. Contractor shall implement the Work Plan as approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Work Plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under the contract. The Contractor shall not commence any Work except in conformance with the terms of the contract.
- c. Failure of the successful Contractor to make revisions as recommended or requested by EPA or the State within the timeframe specified will result in liquidated damages per the amount stated in this contract.

### **Health and Safety Plan**

- a. Within five (5) days after final execution of the contract, the Contractor shall submit to the State for submittal to EPA for review and comment a Health and Safety Plan that ensures the protection of the public health and safety during performance of on-site work under the contract. This plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1- 03, PB 92-963414, June 1992). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910 and any other regulatory agency guidelines. If EPA determines that it is appropriate, the plan shall also include contingency planning. Contractor shall incorporate and adequately address all changes to the plan recommended by EPA and shall implement the plan during the pendency of the removal action.
- b. EPA may approve, disapprove, require revisions to, or modify the submitted Health and Safety Plan in whole or in part. If EPA requires revisions, the Contractor shall submit a revised Health and Safety Plan within fourteen (14) days after receipt of EPA's notification of the required revisions. The Contractor shall implement the Health and Safety Plan as approved in writing by EPA in accordance with the actions approved by EPA. Once approved, or approved with modifications, the Health and Safety Plan, and any subsequent modifications shall be incorporated into and become fully enforceable under the contract. The Contractor shall not commence any work except in conformance with the terms of the contract.
- c. Failure of the Contractor to make revisions as recommended or requested by EPA or the State within the timeframe specified will result in liquidated damages per the amount stated in the contract.

### **Quality Assurance, Sampling, and Data Analysis.**

- a. The Contractor shall use quality assurance, quality control, and other technical activities and chain of custody procedures for all samples consistent with "EPA Requirements for Quality Assurance Project Plans (QA/R5)" (EPA/240/B-01/003, March 2001, reissued May 2006), "Guidance for Quality Assurance Project Plans

## Camp Minden M6 Destruction, Attachment F – Detailed Scope of Services

(QA/G-5)” (EPA/240/R-02/009, December 2002), and subsequent amendments to such guidelines upon notification by EPA or the State to the Contractor of such amendment. Amended guidelines shall apply only to procedures conducted after such notification.

- b. Prior to the commencement of any monitoring project under the contract resulting from this quote or within fifteen (15) days after the final execution of contract award, the Contractor shall submit to the State for EPA approval, a Quality Assurance Project Plan (“QAPP”) that is consistent with the Scope of Services, and the National Contingency Plan.
- c. EPA may approve, disapprove, require revisions to, or modify the submitted QAPP in whole or in part. If EPA requires revisions, Contractor shall submit a revised QAPP within fourteen (14) days after receipt of EPA’s notification of the required revisions. The Contractor shall implement the QAPP as approved in writing by EPA in accordance with the actions approved by EPA. Once approved, or approved with modifications, the QAPP, and any subsequent modifications shall be incorporated into and become fully enforceable under the contract. The Contractor shall not commence any Work except in conformance with the terms of the contract.
- d. Failure of the Contractor to make revisions as recommended or requested by EPA or the State within the timeframe specified will result in liquidated damages per the amount stated in the contract.
- e. The Contractor shall ensure that EPA and State regulator personnel and their authorized representatives are allowed access at reasonable times to all laboratories utilized by the Contractor in implementing the contract resulting from this RFP. In addition, the Contractor shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the QAPP for quality assurance, quality control, and technical activities that will satisfy the stated performance criteria as specified in the QAPP. The Contractor shall ensure that the laboratories they utilize for the analysis of samples taken pursuant to the Settlement Agreement perform all analyses according to accepted EPA methods. Accepted EPA methods consist of, but are not limited to, methods that are documented in the EPA’s Contract Laboratory Program (<http://www.epa.gov/superfund/programs/clp/>), SW 846 “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (<http://www.epa.gov/epawaste/hazard/testmethods/sw846/online/index.htm>), “Standard Methods for the Examination of Water and Wastewater” (<http://www.standardmethods.org/>), 40 C.F.R. Part 136, “Air Toxics - Monitoring Methods” (<http://www.epa.gov/ttnamtl1/airtox.html>),” and any amendments made thereto during the course of the implementation of the contract. However, upon approval by EPA, the Contractor may use other appropriate analytical methods, as long as: (a) quality assurance/quality control (“QA/QC”) criteria are contained in the methods and the methods are included in the QAPP, (b) the analytical methods are at least as stringent as the methods listed above, and (c) the methods have been approved for use by a nationally recognized organization responsible for verification and publication of analytical methods, e.g., EPA, ASTM, NIOSH, OSHA, etc. The Contractor shall ensure that all laboratories they use for analysis

## Camp Minden M6 Destruction, Attachment F – Detailed Scope of Services

of samples taken pursuant to the terms and conditions of the contract resulting therefrom, have a documented Quality System that complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), and "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001, reissued May 2006), or equivalent documentation as determined by EPA. EPA may consider Environmental Response Laboratory Network ("ERLN") laboratories, laboratories accredited under the National Environmental Laboratory Accreditation Program ("NELAP"), or laboratories that meet International Standardization Organization (ISO 17025) standards or other nationally recognized programs (<http://www.epa.gov/fem/accredit.htm>) as meeting the Quality System requirements. Additionally, any contract testing company and laboratory used to generate monitoring data must be Louisiana Environmental Laboratory Accreditation Program (LELAP) certified per LAC 33:I.subpart 3. The Contractor shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to the contract are conducted in accordance with the procedures set forth in the QAPP approved by EPA.

- f. Upon request, the Contractor shall provide split or duplicate samples to the State, EPA and the State regulators, or their authorized representatives. The Contractor shall notify the State, EPA and the State regulators not less than 7 days in advance of any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall provide to the Contractor split or duplicate samples of any samples it takes as part of EPA's oversight of the State's implementation of the Work.
- g. The Contractor, on behalf of the State shall submit to EPA and other state or federal regulatory agencies the results of all sampling and/or tests or other data obtained or generated by or on behalf of the State with respect to the Site and/or the implementation of the contract.
- h. Notwithstanding any provision of the contract, the EPA and State of Louisiana regulating authorities retains all of its information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA, and any other applicable statutes and regulations.

### Post-Removal Site Control.

- a. In accordance with the requirements of this contract, or as otherwise directed by EPA or the State, the Contractor shall submit a proposal for Post-Removal Site Control which shall include, but not be limited to a Post-Removal Site Control and implementation Plan specifying the objectives, implementation, monitoring, inspection, reporting, remediation, and restoration. Upon EPA approval, the Contractor shall conduct Post-Removal Site Control activities in accordance with such plans until such time as EPA determines that no further Post-Removal Site Control is necessary. The Contractor shall provide the State and EPA with documentation of all Post-Removal Site Control measures.

## Camp Minden M6 Destruction, Attachment F – Detailed Scope of Services

- b. In addition to compliance with any and all Post-Removal Site Control directives, the disposal area will be restored to a level consistent with its original condition unless otherwise directed by the State. The contractor will conduct final clean-up of the burn sites and the explosive magazine storage and work areas upon completion of the removal action, according to the Post Removal Site Control Plan. This includes, but is not limited to, removal of all associated equipment, any residues from the M6 and CBI munitions, other solid waste generated during the project (including but not limited to bulk containers (supersacks), cardboard boxes, metal drums, fiber drums, pallets, shrink wrap, ash and any other associated materials), equipment, and any other ignitable materials. The Contractor shall perform hazardous waste characterization and disposal of all waste in accordance with State and federal solid and hazardous waste regulations.

Technical Proposal as stated in the Contractor's quote.

### Reporting

- a. The Contractor shall submit a written progress report to the State concerning actions undertaken pursuant to the implementation of the contract resulting from this contract the 18th day after the date of receipt of EPA's approval of the Work Plan and thereafter, every 21st day after the original report until issuance of Notice of Completion of Work or Final Acceptance, unless otherwise directed in writing by the OSC. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.
- b. All reports will be submitted as two originals unless otherwise stated.
- c. Daily and Monthly Reports. The Contractor will maintain and provide a daily progress report that includes metrics, such as amount/volume/weight of material destroyed during that day total volume/weight of material destroyed, total magazines, completed, and health and safety concerns. Monthly In Progress review meetings will be conducted to measure disposal progress.
- d. Cost Progress Report. Contractor will provide a detailed Cost Progress Report to the Project Coordinator no later than 180 days after the contract notice to proceed date and a subsequent report at 240 days after the contract notice to proceed date. The Cost Progress Report shall be provided monthly thereafter to the Project Coordinator. The report will be in two parts. The first part of the report will include a cost incurred invoice type document with details concerning all work performed during the period to include sufficient documentation to allow verification of accuracy of costs incurred consistent with 40 CFR, 300.160(a)(1). The second part of the report will include an estimate of costs required to complete the contract. It will also include the following details at a minimum – description of remaining

## Camp Minden M6 Destruction, Attachment F – Detailed Scope of Services

work to be performed, personnel, equipment, and materials required and cost associated for each.

- e. Final Report. Submit within fifteen (15) days after completion of all Work required by the implementation of the contract. Contractor shall submit to the State for submittal for EPA review and approval a final report summarizing the actions taken to comply with the implementation of the contract. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports." The final report shall include a listing of quantities and types of materials removed off-site and/or handled on-site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destinations of those materials, a presentation of the analytical results of all sampling and analyses performed, certificate of disposal listing quantity and type of material disposed, and accompanying appendices containing all relevant documentation generated during the removal action (e.g. manifests, invoices, bills, contracts, and permits).

### Off-Site Shipments.

- a. The Contractor may ship hazardous substances, pollutants and contaminants from the Site to an off-site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. The Contractor will be deemed to be in compliance with CERCLA Section 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if the Contractor obtains a prior determination from EPA that the ~~proposed~~ receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b). The Contractor may ship Investigation Derived Waste (IDW) from the Site to an off-site facility only if the Contractor complies with EPA's "Guide to Management of Investigation Derived Waste," OSWER 9345.3-03FS (Jan. 1992). The Military Department and LDEQ must concur with any and all requests for Off-Site Shipments prior to submittal to EPA. Final destinations for shipments of off-site waste must be properly permitted to accept RCRA Subtitle C hazardous waste, and/or RCRA Subtitle D solid waste, as appropriate for the type of waste being shipped off-site.
- b. The Contractor may ship hazardous waste from the Site to an out-of-State waste management facility which is properly permitted to accept RCRA Subtitle C hazardous waste only if, prior to any shipment, they provide written notice to the appropriate State environmental official in the receiving facility's State and to the OSC. This written notice requirement shall not apply to any off-site shipments when the total quantity of all such shipments will not exceed ten (10) cubic yards. The written notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of hazardous waste to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. The Contractor also shall notify the State, State environmental official referenced above and the OSC of any major changes in the shipment plan, such as a decision to ship the hazardous waste to a different out-of-State facility.

**Camp Minden M6 Destruction, Attachment G – Certification and Disclosure Form**

\_\_\_\_\_  
(Contractor Name)

\_\_\_\_\_  
(Contractor Address)

\_\_\_\_\_  
(Contractor City, State, Zip)

Date: \_\_\_\_\_

**Contractor Certification and Disclosure Form**

I, \_\_\_\_\_, do hereby certify that:  
(Print Name)

- a. As an entity contracting with the State of Louisiana Military Department (LMD), I acknowledge and agree that I am responsible for ensuring there is no conflict of interest or violation of the State of the Louisiana Ethics Code.
- b. Neither I, nor any of my employees, have immediate family members who work for the LMD. In addition, no member of the LMD has a controlling interest in my company, as defined in the Louisiana Ethic Code.
- c. ☐ Neither I, nor any of my employees, have any other relationships with LMD employees that are or may be perceived as improper or unethical; OR

☐ I hereby disclose freely and with no reservations that I, or the below listed employee, have/has relationships with the following LMD employee (s): \_\_\_\_\_

\_\_\_\_\_  
The nature of this/these relationship (s) is/are (personal, professional; number of years of relationship, etc): \_\_\_\_\_

- d. The information above is true and correct, and should anything come to my attention that would damage the answers above, I will inform LMD immediately.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed name)



**Camp Minden M6 Destruction, Attachment H – E-verification**

**Sworn Affidavit**

\_\_\_\_\_  
(Date)

I hereby verify that all of the employees of \_\_\_\_\_ have been placed into the (E-Verify System) and are US-Born Citizens or Legal Aliens.

Contract Title: \_\_\_\_\_

Contract number: \_\_\_\_\_

\_\_\_\_\_  
(Witness Signature)

\_\_\_\_\_  
(Company Name)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Witness Signature)

\_\_\_\_\_  
(Notary Signature / Seal)

## **Camp Minden M6 Destruction, Attachment I - Insurance**

### **A. MINIMUM SCOPE AND LIMITS OF INSURANCE**

#### **1. Workers Compensation**

Workers Compensation insurance shall be in compliance with the Workers Compensation law of the State of Louisiana. Employers Liability is included with a minimum limit of \$1,000,000 per accident/per disease/per employee. A.M. Best's insurance company rating requirement may be waived for workers compensation coverage only.

The insurer shall agree to waive all rights of subrogation against the State of Louisiana, its departments, agencies, boards and commissions, including agents, officers, employees and volunteers, and EPA for losses arising from work performed by the Contractor for the (Military Department, State of Louisiana).

The Contractor and the subcontractor shall satisfy, all applicable laws and regulations regarding the provisions of worker's compensation insurance for all persons performing work on this Contract.

#### **2. Commercial General Liability**

Commercial General Liability insurance, including coverage for explosion risk, shall have a minimum limit per occurrence of \$10,000,000, inclusive of umbrella and/or excess liability coverage. An Occurrence Policy Form is required for this coverage.

The State of Louisiana, its departments, agencies, boards and commissions, including agents, officers, employees and volunteers, and EPA shall be named as Additional Insured on the Contractor's Commercial General Liability Policy.

#### **3. Automobile Liability**

Automobile Liability Insurance shall have a minimum limit per occurrence of \$1,000,000 with a combined single limit of \$3,000,000 dollars. This insurance shall include third-party bodily injury and property damage liability for owned, non-owned, and hired automobiles. An Occurrence Policy Form is required for this coverage.

Auto Liability Hazardous Cargo Endorsement Provision:

If the contractor utilizes a vehicle that is licensed or should be licensed for use on roads, and the vehicle will be used in the transporting, loading or unloading of hazardous materials, the Automobile Liability Insurance shall be endorsed to include coverage for hazardous cargo exposure.

#### **4. Project Specific Pollution Liability**

Project Specific Pollution Liability insurance, including gradual release as well as sudden and accidental, shall have a minimum limit per occurrence of not less than \$10,000,000, inclusive of umbrella and/or excess liability coverage. An Occurrence Policy Form is preferred.

A Claims-Made Policy Form is acceptable subject to the Contractor's purchase of a ten (10) year Extended Reporting Endorsement (tail coverage). A policy period

## **Camp Minden M6 Destruction, Attachment I - Insurance**

inception date of no later than the first day of anticipated work under this contract and an expiration date of no earlier than 30 days after anticipated completion of all work under the contract shall be provided.

The State of Louisiana, its departments, agencies, boards and commissions, including agents, officers, employees and volunteers, and EPA shall be named as Additional Insured on the Contractor's Pollution Liability Policy.

### **B. DEDUCTIBLES AND SELF-INSURED RETENTIONS**

Any deductibles or self-insured retentions must be declared to and accepted by the MILITARY DEPARTMENT, STATE OF LOUISIANA and EPA. The Contractor shall be responsible for all deductibles and self-insured retentions.

### **C. ALL COVERAGE PROVISIONS**

1. Coverage shall not be canceled, suspended, or voided by either party (the Contractor or the insurer) or reduced in coverage or in limits except after 30 days written notice has been given to the MILITARY DEPARTMENT, STATE OF LOUISIANA and EPA. Ten-day written notice of cancellation is acceptable for non-payment of premium. Notifications shall comply with the standard cancellation provisions in the Contractor's policy.
2. Neither the acceptance of the completed work nor the payment thereof shall release the Contractor from the obligations of the insurance requirements or indemnification agreement.
3. The insurance companies issuing the policies shall have no recourse against the State of Louisiana or its agencies, or EPA for payment of premiums or for assessments under any form of the policies.
4. Any failure of the Contractor to comply with reporting provisions of the policy shall not affect coverage provided to the State of Louisiana, its departments, agencies, boards and commissions, including agents, officers, employees and volunteers, and EPA.

### **D. ACCEPTABILITY OF INSURERS**

All required insurance shall be provided by a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located. Insurance shall be placed with insurers with an A.M. Best's rating of **A:-VI or higher**. This rating requirement may be waived for workers compensation coverage only.

If at any time an insurer issuing any such policy does not meet the minimum A.M. Best rating, the Contractor shall obtain a policy with an insurer that meets the A.M. Best rating and shall submit another Certificate of Insurance as required in the contract.

## **Camp Minden M6 Destruction, Attachment I - Insurance**

### **E. VERIFICATION OF COVERAGE**

Contractor shall furnish the Military Department, State of Louisiana and EPA with Certificates of Insurance reflecting proof of required coverage. The Certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The Certificates are to be received and approved by the Military Department, State of Louisiana and EPA before work commences and upon any contract renewal thereafter. The Military Department, State of Louisiana, and EPA reserves the right to request complete certified copies of all required insurance policies at any time.

At least seven (7) days prior to commencing any on-site work under this Contract provide the Military Department, State of Louisiana and EPA with all required insurance certificates. The insurance certificates must be mailed from the insurance provider to Military Department, State of Louisiana, Office of State Procurement and EPA at the designated mailing addresses.

Upon failure of the Contractor to furnish, deliver and maintain such insurance as above provided, this contract, at the election of the Military Department, State of Louisiana and EPA may be suspended, discontinued or terminated. Failure of the Contractor to purchase and/or maintain any required insurance shall not relieve the Contractor from any liability or indemnification under the contract.

### **F. SUBCONTRACTORS**

Contractor shall be responsible for verifying and maintaining the Certificates provided by each subcontractor. Subcontractors shall be subject to all of the requirements stated herein. The State of Louisiana, its departments, agencies, boards and commissions, including agents, officers, employees and volunteers, and EPA shall be named as Additional Insured on all Subcontractor's insurance policies. The Military Department, State of Louisiana and EPA reserves the right to request copies of Subcontractor's Certificates at any time.

### **G. INDEMNIFICATION/HOLD HARMLESS AGREEMENT**

Contractor agrees to protect, defend, indemnify, save, and hold harmless, the State of Louisiana, its departments, agencies, boards and commissions, its officers, agents, servants, employees, and volunteers, and EPA from and against any and all claims, damages, expenses, and liability arising out of injury or death to any person or the damage, loss or destruction of any property which may occur, or in any way grow out of, any act or omission of Contractor, its agents, servants, employees, and subcontractors or any and all costs, expenses and/or attorney fees incurred by Contractor as a result of any claims, demands, suits or causes of action, except those claims, demands, suits, or causes of action arising out of the negligence of the State of Louisiana, its departments, agencies, boards, commissions, its officers, agents, servants, employees and volunteers, and EPA.

Contractor agrees to investigate, handle, respond to, provide defense for and defend any such claims, demands, suits, or causes of action at its sole expense and agrees to bear all other costs and expenses related thereto, even if the claims, demands, suits, or causes of action are groundless, false or fraudulent.

## **Camp Minden M6 Destruction, Attachment J - Definitions**

A. Additives – Pricing & cost items listed in the clarification or as provided by the contractor and made part of the contract.

B. Agency- Any department, commission, council, board, office, bureau, committee, institution, agency, government, corporation, or other establishment of the executive branch of this State authorized to participate in any contract resulting from this solicitation.

C. ARAR – Applicable or Relevant and Appropriate Requirements

D. Camp Minden Site – Facilities and lands, including Area I, associated with or in connection with Explo Systems, Inc. Site (“Site”) generally located on a portion of Camp Minden, La., and within the northwestern corner of the State of Louisiana, in Webster Parish, near the town of Doyline.

E. CERCLA – shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C §§9601-9675

F. CBI – Clean Burning Igniter powder in storage at the Site originating from Explo operations involving the demilitarization of materials from the United States Army.

G. Contractor – Any person having a contract with a governmental body. For the actions of this contract, the Contractor should be understood to refer to the successful Proposer responding to the request for quotes.

H. Day – Shall mean a calendar day.

I. Discussions- A formal, structured means of conducting written or oral communications/presentations.

J. DOA – Division of Administration, State of Louisiana

K. DPS – Louisiana Department of Public Safety and its successor departments, agencies, or instrumentalities.

L. EPA – United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

M. LDEQ – Louisiana Department of Environmental Quality and its successor departments, agencies, or instrumentalities.

N. MACT – Maximum Achievable Control Technology

O. May - The term “may” denotes an advisory or permissible action.

P. Military Department – “Louisiana Military Department,” Settling Respondent of the Administrative Settlement Agreement and Order on Consent, or “Military Department, State of Louisiana,” or “Department of Military Affairs.”

Q. Must - The term “must” denotes mandatory requirements.

R. NCP – “National Contingency Plan,” shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C § 9605,

## **Camp Minden M6 Destruction, Attachment J - Definitions**

codified at 40 C.F.R. Part 300, and any amendments thereto.

S. Net weight - is the actual weight of the product alone (M6 Propellant and CBI), discounting the weight of its container, packaging material, and pallet.

T. OSC – On Scene Coordinator from EPA

U. OSHA – Occupational Safety and Health Administration and its successor departments, agencies, or instrumentalities.

V. OSP – Office of State Procurement, Division of Administration, State of Louisiana.

W. Particulate Matter – equals filterable and condensable matter collected in a Method 5 Test per 40 CFR 60 Appendix A. All particulate matter is to be assumed to be PM10 for the ARARs.

X. Proposer – A firm, venture or individual who responds to this request for quotes.

Y. PRPs – Potential Responsible Parties.

Z. RCRA – shall mean the Solid Waste Disposal Act, 42 U.S.C §§ 9601-9992 (also known as the Resource Conservation and Recovery Act)

AA. RECAP – Risk Evaluation / Corrective Action Program regulation. This regulation establishes the LDEQ minimum remediation standards for present and past uncontrolled constituent releases.

BB. Settlement Agreement or AOC – Administrative Settlement Agreement and Order on Consent for Removal Action, U.S. Environmental Protection Agency Region 6, CERCLA Docket Number 06-08-14.

CC. Shall – The term “shall” denotes mandatory requirements per RS: 39:1556(52).

DD. Should – The term “should” denotes a desirable action.

EE. SOP – Standard Operating Procedures

FF. State – The State of Louisiana.

GG. Utilities – shall mean all electric, gas, natural gas, propane gas, sewer/septic, and water/drinking water requirements of the Contractor. All temporary connections for utilities shall be furnished and maintained at his own expense. All temporary connections for utilities shall be subject to the approval of the Project Coordinator.

HH. Weather delays – Contractor shall, within ten (10) days after the beginning of any weather delay, notify the Project Coordinator in writing of the cause of delay. Delays include but are not restricted to: floods, hurricanes, fires, abnormal/severe weather conditions. The Project Coordinator shall ascertain the facts and the extent of the delay and the extent of time for completing the work when in his judgment the findings of fact justify such an extension.

II. Work – shall mean all activities and obligations required by this contract and/or amendments and change orders to this contract.

## 5/21/201

[illegible]

[illegible]



[illegible]

L-2				5/21/201
BLDG #	ITEM DISCRIPTION	# OF SKIDS	WEIGHT	TOTAL
2ND ROAD				
2421	M-6 PROPELLANT (140lb brlx6)	28	168,200	
300,000	M-6 PROPELLANT (140lb brlx6)	57	47,880	
	" " (880lb Bulk)	45	39,600	196,680
2422	M-6 PROPELLANT (880 lb Bulk)	154	135,520	135,520
300,000				
2423	M-6 PROPELLANT (60lb x 36)	25	54,000	
125,000	" " (880lb BULK BX)	80	70,400	124,400
2471	CBI	91	85,594	
125,000	M-6 PROPELLANT (880 lb Bulk)	40	35,200	
	BLACK POWDER	1	105	
	PERCHLORATE	1	340	
	M-6 PROPELLANT (140lb x 6Brls)	6	5,149	
	" " (880lb Bulk)	2	6,400	132,611
2424	M-6 PROPELLANT (880lb BULK bx)	142	124,960	124,960
125,000				
2425	M-6 PROPELLANT (880LB Bulk)	142	124,960	124,960
125,000				
2472	FLAMMABLE SOLID	137	246,300	246,300
125,000	M-6 PROPELLANT (880LB Bulk)	141	124,080	124,080
2426	M-6 PROPELLANT (880LB Bulk)	142	124,960	124,960
125,000				
2473	FLAMMABLE SOLID	123	221,400	221,400
125,000	M-6 PROPELLANT (880LB Bulk)	110	96,800	96,800
2427	M-6 PROPELLANT (880 lb Bulk)	142	124,960	124,960
125,000				
2474	M-6 PROPELLANT (140lb brlx6)	40	33,600	
125,000	" " (880 lb Bulk)	102	89,760	
	" " (140lb x 6Brls for ship)	84	70,560	193,920
2428	M-6 PROPELLANT (121lb brlx6)	86	62,436	
125,000	" " (140lb brlx4)	38	21,280	
	" " (140lb brlx6)	49	41,160	124,876
	<del>TYPE 2</del>	<del>24</del>	<del>12,796</del>	
	<del>TYPE 7</del>	<del>1</del>	<del>30</del>	
	<del>TYPE 13</del>	<del>6</del>	<del>2,258</del>	
2429	M-6 PROPELLANT (60lb x 36bx)	120	259,200	259,200
300,000				
2430	M-6 PROPELLANT (140lb brlx6)	205	172,200	
300,000	" " (140lb brlx4)	42	23,520	
	" " (880lb BULK BX)	29	25,520	221,240

[illegible]

L-2				5/21/201
BLDG #	ITEM DISCRIPTION	# OF SKIDS	WEIGHT	TOTAL
4TH ROAD				
2438	M-6 PROPELLANT (880lb Bulk)	142	124,960	124,960
125,000				
2477	M-6 PROPELLANT (60lb X 36bx)	142	255,600	255,600
125,000	" (880lb bulk bx)	14	30,240	
		97	85,360	115,600
2439	M-6 PROPELLANT (100lb brlx6)	12	7,200	
125,000	" (120lb brlx6)	6	4,320	
	" (121lb brlx6)	105	76,230	
	" (140lb brlx4)	24	13,440	
	" (140lb brlx6)	28	23,520	124,710
2440	M-6 PROPELLANT (60lbX36)	25	54,000	
125,000	" (880lb BULK BX)	80	70,400	124,400
2478	M-6 PROPELLANT (880lb BULK BX)	185	162,800	
125,000	" (120lbX6Brls)	2	1,440	
	" (121lbX6Brls)	1	726	
	" (140lbX4Brls)	69	38,640	203,606
2441	M-6 PROPELLANT (880lb bulk bx)	142	124,960	124,960
125,000				
2442	M-6 PROPELLANT (880lb bulk bx)	166	146,080	146,080
300,000				
2443	M-6 PROPELLANT (60lb bxX36)	49	116,424	
300,000	" (100lb brlx6)	1	600	
	" <121lb brlx6>	3	2,178	
	" (140lb brlx4)	2	1,120	
	" (140lb brlx6)	115	96,600	216,922



5/21/2013

**L-3**

[illegible]

5/21/2013

**L-3**

[illegible]

5/21/2013

[illegible]

5/21/201

**L-4**

[illegible]



# **Camp Minden M6 Destruction**

## **Attachment L**

**Schedule of Values dated June 15, 2015**

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# Camp Minden Contained Burn System Project



## Schedule of Values

Date 6/15/2015

The Schedule of Values below sets forth the total amount of progress payment which Contractor will receive for each listed action item once such action item has been completed and Contractor has provided the State with documentation and/or other evidence proving that such action has been completed. For listed action items which require an extended period of time to complete, Contractor may invoice on a percentage of completion basis upon providing the State with documentation and/or other evidence proving that such progress has been made. The State shall have the right to investigate and verify any such documentation and/or evidence before making payment. It is not intended to be an all-inclusive list and may be modified as the work progresses upon mutual consent of both parties. It will not supersede established contract funding limits.

Invoice / pay requests shall be in the format of an Application & Certification for Payment AIA Document G702 and Continuation Sheet AIA G703. All pay requests shall be supported by contractor invoicing/pay documentation and/or validated performance documentation for payment approval.

TASK	DESCRIPTION OF WORK	SCHEDULED VALUE		Critical Request
		Total	Detailed	
1.00	<b>Contract Award</b>			
1.01	Bond Fee (\$19.3MM)	\$436,000		
1.02	Bond Fee Increased from \$19.3MM to \$28MM	\$195,000		
1.03	Insurance	\$554,789		
	Spread out over the project	(\$1,185,789)		
2.00	<b>Pre-mobilization</b>			
2.01	Plans	\$180,547		
2.01a	Submittal of Work Plan		\$33,547	
2.01b	Submittal of Health and Safety Plan		\$27,000	
2.01c	Submittal of Sampling Analysis Plan		\$22,500	
2.01d	Quality Assurance and Project Plan		\$30,000	
2.01e	Storm Water Pollution Prevention Plan		\$22,500	
2.01f	Submittal of Spill and Emergency Response Plan		\$10,000	
2.01g	Submittal of Reporting Plan		\$15,000	
2.01h	Submittal of Site Restoration and Closure Plan		\$20,000	
2.02	Personnel Certifications (Training & Licensing)	\$40,000		
3.00	<b>Mobilization &amp; Site Ancillary Setup</b>			
3.01	Magazine Assessment & Prioritization	\$47,000		
3.02	Baseline Site Soil Sampling	\$14,800		
3.03	Site Work Access Road and Work Areas	\$74,000		
3.03a	All-Weather Surface installed Range Control		\$20,500	
3.03b	All-Weather Surface installed Material Storage		\$26,300	
3.03c	All-Weather Surface installed Fuel Storage		\$3,200	
3.03d	All-Weather Surface installed Magazine Storage		\$3,000	
3.03e	All-Weather Surface installed Access Roads		\$21,000	
3.04	Range Control Center & Access Control Gate	\$65,000		
3.04a	Modular Office Delivered, Setup, Secured		\$38,000	
3.04b	Utilities Connected, Fees paid		\$9,000	
3.04c	Controlled Access Gate Installed		\$18,000	
3.05	Material Staging Area Construction	\$162,487		
3.05a	Delivery of Covered Building		\$40,000	
3.05b	Erection of Covered Building		\$23,000	
3.05c	Electrical Supply		\$12,387	
3.05d	Installation of Lights		\$8,100	
3.05e	Installation & certification of Scales		\$14,700	
3.05f	Delivery of Hoppers		\$27,000	
3.05g	Delivery & Installation of Transfer Equipment		\$28,500	
3.05h	Grounding and Bonding		\$3,500	
3.05i	Video CCTV		\$5,300	
3.06	Control Room and MCC Construction	\$44,000		
3.06a	Electrical Supply		\$9,700	
3.06b	Communications Supply		\$8,800	
3.06c	Build out of building		\$25,500	

TASK	DESCRIPTION OF WORK	SCHEDULED VALUE		Critical Request
		Total	Detailed	
3.07	Explosive Magazine Storage Area Construction	\$24,300		
3.07a	Delivery & Set-up of Type II Magazines		\$18,000	
3.07b	Build-out of Magazine Internal		\$3,300	
3.07c	Erection of covered working area, work table		\$3,000	
3.08	Establishing Fuel Service to Site	\$241,625		
3.08a	Diesel Fuel Storage Area Equipment		\$11,000	
3.08b	Natural Gas Supply Materials		\$51,875	
3.08c	Natural Gas Supply Installation		\$178,750	
3.09	Mobile Equipment Delivered	\$41,000		
3.10	Tools and Consumables (Safety) Delivered	\$19,000		
3.11	Install appropriate warning signs	\$3,200		
3.12	Civil Engineering Design and Drawings	\$120,000		
3.12a	Design Draft Complete		\$36,000	
3.12b	Construction Drawings		\$84,000	
3.13	Mechanical Equipment Design and Drawings	\$155,000		
3.13a	Process Design		\$46,500	
3.13b	Equipment Layout Drawings Complete		\$46,500	
3.13c	Fabrication Drawings Complete		\$62,000	
3.14	Electrical Design & Drawings	\$140,000		
3.14a	Process Design		\$42,000	
3.14b	Power Distribution		\$49,000	
3.14c	Control System		\$49,000	
3.15	Air Modeling	\$27,000		
3.16	Construct Engineered Foundation	\$319,730		
3.16a	Signing Survey & Soil Study		\$29,000	
3.16b	Excavation		\$51,000	
3.16c	Steel Structural Support		\$47,000	
3.16d	Finished Slab		\$192,730	
3.17	Supply of Thermal Treatment Chamber (TTC)	\$3,037,000		
3.17a	Order Placement		\$911,100	\$911,100
3.17b	Order of Shell Materials		\$303,700	
3.17c	Approval of Fabrication Drawings		\$303,700	
3.17d	Order of Nozzle Materials		\$151,850	
3.17e	Pressure Test		\$151,850	
3.17f	Fabrication Complete		\$255,550	
3.17g	Delivery Onsite		\$959,250	
3.18	Supply of TTC Autoclave Door	\$185,000		
3.18a	Order Placement		\$55,500	
3.18b	Approval of Fabrication Drawings		\$33,917	
3.18c	Fabrication Complete		\$61,667	
3.18d	Delivery Onsite		\$33,917	
3.19	Supply of Trolley Loading System	\$188,000		
3.19a	Order Placement		\$56,400	
3.19b	Approval of Fabrication Drawings		\$34,467	
3.19c	Fabrication Complete		\$62,667	
3.19d	Delivery Onsite		\$34,467	
3.20	Supply of Actuated PAS Valve	\$98,000		
3.20a	Order Placement		\$29,400	
3.20b	Approval of Fabrication Drawings		\$22,050	
3.20c	Fabrication Complete		\$24,500	
3.20d	Delivery Onsite		\$22,050	
3.21	Supply of PAS Cyclone	\$110,000		
3.21a	Order Placement		\$33,000	
3.21b	Approval of Fabrication Drawings		\$22,000	
3.21c	Fabrication Complete		\$33,000	
3.21d	Delivery Onsite		\$22,000	
3.22	Supply of PAS ID Fan	\$97,000		
3.22a	Order Placement		\$29,100	
3.22b	Approval of Fabrication Drawings		\$17,783	
3.22c	Fabrication Complete		\$32,333	
3.22d	Delivery Onsite		\$17,783	
3.23	Supply of PAS Stack	\$67,000		
3.23a	Order Placement		\$20,100	
3.23b	Approval of Fabrication Drawings		\$12,283	
3.23c	Fabrication Complete		\$22,333	
3.23d	Delivery Onsite		\$12,283	

TASK	DESCRIPTION OF WORK	SCHEDULED VALUE		Critical Request
		Total	Detailed	
3.24	Supply of PAS Gas Cooler	\$260,000		
3.24a	Order Placement		\$78,000	
3.24b	Approval of Fabrication Drawings		\$47,667	
3.24c	Fabrication Complete		\$86,667	
3.24d	Delivery Onsite		\$47,667	
3.25	Supply of PAS Baghouse	\$205,000		
3.25a	Order Placement		\$61,500	
3.25b	Approval of Fabrication Drawings		\$37,583	
3.25c	Fabrication Complete		\$68,333	
3.25d	Delivery Onsite		\$37,583	
3.26	Supply of PAS Afterburner	\$2,872,497		
3.26a	Order Placement of Combustion Chambers		\$861,747	
3.26b	Order Placement of Burner/Fuel Train		\$348,804	
3.26c	Order Placement of Refractory		\$348,804	
3.26d	Approval of Fabrication Drawings		\$348,804	
3.26e	Combustion Fabrication Complete		\$348,804	
3.26f	Refractory Installation Complete		\$205,179	
3.26g	Fuel Train Complete		\$205,179	
3.26h	Delivery Onsite		\$205,179	
3.27	Supply of PAS Recuperator	\$40,000		
3.27a	Order Placement		\$12,000	
3.27b	Approval of Fabrication Drawings		\$7,000	
3.27c	Fabrication Complete		\$13,000	
3.27d	Delivery Onsite		\$8,000	
3.28	Supply of PAS SNCR System	\$105,000		
3.28a	Order Placement of Pumps		\$31,500	
3.28b	Order Placement of Storage Tank		\$17,850	
3.28c	Order Placement of Pipe Train Components/Cabinet		\$7,350	
3.28d	Approval of Fabrication Drawings		\$12,600	
3.28e	Fabrication Complete - Pipe Train Cabinet		\$17,850	
3.28f	Delivery Onsite		\$17,850	
3.29	Supply of PAS HEPA/SCR	\$1,327,000		
3.29a	Order Placement of SCR Modules		\$438,000	\$438,000
3.29b	Order Placement of SCR Reactor Housing		\$120,650	
3.29c	Order Placement of HEPA		\$41,275	
3.29d	Approval of Fabrication Drawings SCR		\$215,900	
3.29e	Approval of Fabrication Drawings HEPA		\$41,275	
3.29f	Fabrication Complete - HEPA		\$57,150	
3.29g	Fabrication Complete - SCR Reactor Housing		\$120,650	
3.29h	Fabrication Complete - SCR Modules		\$152,400	
3.29i	Delivery Onsite - HEPA		\$31,750	
3.29j	Delivery Onsite - SCR Reactor Housing		\$57,150	
3.29k	Delivery Onsite - SCR Modules		\$50,800	
3.30	Supply of PAS Ductwork	\$255,000		
3.30a	Order Placement		\$76,500	
3.30b	Approval of Fabrication Drawings		\$46,750	
3.30c	Fabrication Complete		\$85,000	
3.30d	Delivery Onsite		\$46,750	
3.31	Supply of CBC and PAS Spare Parts	\$205,000		
3.31a	Order Placement		\$92,250	
3.31b	Delivery Onsite		\$112,750	
3.32	Supply of MCC, Dist. & Load Panels	\$356,420		
3.32a	Order of Materials		\$106,926	
3.32b	Fabrication Complete		\$142,568	
3.32c	Delivery Onsite		\$106,926	
3.33	Supply of Instruments	\$85,000		
3.33a	Order of Materials		\$42,500	
3.33b	Delivery Onsite		\$42,500	
3.34	Supply of PLC and Controls Equipment	\$345,000		
3.34a	Order of Materials		\$103,500	
3.34b	Fabrication Complete		\$138,000	
3.34c	Delivery Onsite		\$103,500	
3.35	Supply of CCTV System	\$11,000		
3.35a	Order of Materials		\$3,300	
3.35b	Delivery Onsite		\$7,700	
3.36	Supply of Air Compressor	\$68,000		

TASK	DESCRIPTION OF WORK	SCHEDULED VALUE		Critical Request
		Total	Detailed	
3.36a	Order of Materials		\$20,400	
3.36b	Delivery Onsite		\$47,600	
3.37	Supply of CEMS	\$423,940		
3.37a	Order of Materials		\$148,379	\$148,379
3.37b	Fabrication Complete		\$148,379	
3.37c	Delivery Onsite		\$127,182	
3.38	Equipment Installation Mobilization	\$80,000		
3.39	Mechanical Installation of Equipment	\$280,000		
3.39a	Gas Cooler Installed		\$14,000	
3.39b	Stack Installed		\$7,000	
3.39c	SCR Installed		\$14,000	
3.39d	Cyclone Installed		\$7,000	
3.39e	Afterburner Installed		\$14,000	
3.39f	Fan Installed		\$7,000	
3.39g	SNCR Installed		\$28,000	
3.39h	NH3 Supply Installed		\$14,000	
3.39i	Burner Train Installed		\$7,000	
3.39j	Air Compressor Installed		\$7,000	
3.39k	Pre-TTC Ductwork Installed		\$42,000	
3.39l	Ductwork Insulation		\$28,000	
3.39m	Thermal Treatment Chamber Installed		\$70,000	
3.39n	Post-TTC Ductwork Installed		\$14,000	
3.39o	Trolley Loading System Installed		\$7,000	
3.40	Installation of All-Weather Shelter of Loading Area	\$40,000		
3.41	Electrical/Controls Installation Mobilization	\$80,000		
3.42	Installation of Electrical Wiring (Eqpt. Power, Lighting)	\$290,000		
3.42a	MCC Installed		\$45,000	
3.42b	Order of Materials (wiring, conduit, etc)		\$75,000	
3.42c	Control Panel Power		\$45,000	
3.42d	Equipment Power		\$65,000	
3.42e	Site Lighting		\$60,000	
3.43	Installation of Instrumentation/Controls/Comms.	\$90,000		
3.43a	Instrumentation Installed		\$27,000	
3.43b	Instrument Terminations		\$45,000	
3.43c	Comms. Installed		\$18,000	
3.44	Systemization and Training	\$170,000		
3.44a	CEMS Performance Evaluation Plan		\$5,000	
3.44b	Startup, Shutdown, and Malfunction Plan		\$4,000	
3.44c	Comprehensive Performance Test Plan including QAPP		\$4,000	
3.44d	CMS Performance Evaluation Test Plan		\$4,000	
3.44e	Operation & Maintenance Plan		\$4,000	
3.44f	Emergency Safety Valve Operating Plan		\$4,000	
3.44g	Bag House Corrective Measures Plan		\$4,000	
3.44h	Inert System Systemized		\$60,000	
3.44i	Live System Systemization		\$30,000	
3.44j	Training		\$51,000	
3.45	System O&M Manual	\$40,000		
3.46	As Built Drawings	\$24,000		
3.47	Initial Live Testing	\$40,000		
3.48	Stack Testing Comprehensive Performance	\$100,000		
4.00	<b>Phase 2 - Removal and Destruction</b>			
	<b>Material</b>	<b>\$</b>	<b>lbs.</b>	<b>Unit Cost</b>
4.01	M-6 Propellant	\$14,130,000	15,700,000	\$0.90
4.02	Clean Burning Igniter	\$163,200	320,000	\$0.51
4.03	Additional Cost: based at same unit cost/ pound as above			
5.00	<b>Phase 3 - Site Restoration and Demobilization</b>			
5.01	Environmental Soil Sampling and Reporting	\$34,638		
5.01a	Soil Sampling		\$24,838	
5.01b	Data Review, Analysis & Report		\$9,800	
5.02	Removal of all Equipment and Material	\$157,000		
5.02a	CBC System		\$127,000	
5.02b	Fixed Equipment		\$18,000	
5.02c	Concrete		\$12,000	
5.03	Restoration of Area			

TASK	DESCRIPTION OF WORK	SCHEDULED VALUE		Critical Request
		Total	Detailed	
5.03a	Removal of All-Weather Surfaces	\$12,000		
5.04	Final Report & Project Closeout	\$272,000		
5.04a	On-site Disposal Summary		\$54,400	
5.04b	Off-site Disposal Summary		\$54,400	
5.04c	Environmental Summary Stack Emissions CEMS		\$68,000	
5.04d	Safety Summary		\$27,200	
5.04e	Administration Record Retention		\$68,000	
	<b>Original Project Scope Sub-Total</b>	<b>\$28,062,384</b>		
6.00	<b>Additional Cost - Clarification Request (EPA Criteria)</b>			
	<b>3rd Clarification</b>			
6.01	Additional Comprehensive Stack Testing	\$93,824		
6.02	Additional HCL Sampling to CPT	\$12,371		
6.03	Periodic Stack Testing SVOC quarterly (\$69,413 per Test)	\$208,239	\$69,413	
6.04	Split or Duplicate SVOC during quarterly event		\$33,385	
6.05	Ground Water Monitoring Well Installation		\$63,700	
6.06	Quarterly Ground Water Sampling Event	\$65,000	\$16,250	
6.07	Surface Water & Sediment Sampling Event	\$11,000	\$5,500	
6.08	Surface Water & Sediment Sampling Split or Duplicate		\$3,800	
6.09	Dedicated Sample Platform for quarterly testing		\$23,760	
6.10	Community Air Monitoring Plan Submittal		\$21,000	
6.11	Air Monitoring Equipment	\$1,929,363		
6.11a	Community Air Monitoring Equipment		\$964,682	
6.11b	Monitoring Stations Build out (25%)		\$482,341	
6.11c	System Deployment/Testing (25%)		\$482,341	
6.11d	Community Air Monitoring Baseline (Start-up)		\$134,613	
6.11e	Community Air Monitoring Continuous -weekly	\$2,282,124	\$39,937	
6.11f	Community Soil Monitoring (weekly - \$2,625)	\$149,993	\$2,625	
6.12	Environmental Groundwater Sampling and Reporting	\$65,000	\$16,250	
6.13	Soil Sampling & Monitoring Well Plug & Abandonment	\$41,600		
6.14	Environmental Surface water Sampling and Reporting	\$11,000	\$5,500	
	<b>Clarification 4 - per EPA revised ARARs</b>			
6.15	Testing			
6.15a	Dioxin & Furan Stack Testing every 6 months	\$77,100	\$38,550	
6.15b	VOC Stack Testing Quarterly	\$145,740	\$36,435	
6.16	Additional Equipment & Monitoring			
6.16a	Afterburner Combustion Air Flow Monitoring	\$40,950		
6.16b	Additional Stack Sampling Port	\$3,300		
6.16c	Additional/Upgraded PAS Equipment & Programming	\$887,868		
6.17	Estimated Contained Burn Chamber Expedited Timeline	\$150,000		
6.18	Additional Fuel for Afterburner exceeding 13.5 MMBtu/hr due to additional EPA Criteria to 7%O <sub>2</sub>		billed @ market value	
7.00	<b>Other</b>			
7.01	Additional environmental testing, monitoring and other actions required by EPA, LDEQ or other environmental authorities which are not included in the Contract price will be reimbursed at actual expenses reasonably incurred plus 15%.			
7.02	Losses incurred by Contractor as a result of shutdowns or delays required by EPA, LDEQ or other environmental authorities which are not the fault of Contractor and which are not included in the Contract price will be reimbursed at actual expenses reasonably incurred.			
	<b>SOV TOTAL</b>	<b>\$34,236,856</b>		<b>\$1,497,479</b>