



Work Plan Kiln or Contained Burn Chamber

For:

Removal of Hazardous Materials in Connection with Explo Systems, Inc.
Camp Minden
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Basis for Our Operational Work Plan and Technical Approach

ESI have developed our operational plans, technical approaches, and related required resources based upon extensive review of proven alternative technologies to open burning. Consideration for community and worker safety and health, throughput capacity, emissions, destruction removal efficiency minimization of waste (volume reduction) were all paramount to selecting the best available proven technology.

This proposal is in accordance with all Federal & State Laws and Regulations, policies, guidance and requirements, information gained from the mandatory site visit on December 18, 2014, and relevant technical DOD reference documents. We also have independent knowledge and experience within our team relating to disposal, storage and handling of M-6 propellant as well as other explosives. We have also considered the following key assumptions and points of understanding in developing our operational plans and technical approaches:

- Public safety for community and workers is of the utmost importance
- Minimum safe separation distances from DOD 4246.26-M were considered based on inhabited buildings, public roadways and on-site disposal operations. These considerations were based on maximum amounts of material to be disposed of with safe separation distances between the Thermal Treatment System, contract personnel and Camp Minden personnel per DOD publications.
- Air quality monitoring for emissions is based on Key Environmental and Compliance Considerations as well as community concerns. ESI will comply with all EPA/LDEQ emission requirements as required by statute.
- We developed and will maintain a magazine priority plan to address present and ongoing material stability in the ninety (90) magazines.
- All DOTD regulation will be complied with on this project with exception of shipping papers. Any deviations from the regulations will be requested in writing and approved prior to implementation at Camp Minden.
- “ONLY” properly licensed, trained and experienced personnel will be permitted to work on our team. All explosively trained personnel have undergone a criminal background check and drug screening prior to working. ESI and all of its employees will comply with LSP and ATFE and any other regulatory authorities by random inspections at the site and other locations owned/operated by ESI. The ESI HSE coordinator shall ensure that all personnel licensing remains current for the duration of this project.

- A spill and emergency response plan, storm water pollution prevention, quality assurance project plan will be submitted in support of this project within 10 working days upon notice to proceed similar to the ones submitted for the January 21, 2015 proposal.
- ESI will maintain a clean work site by daily managing its waste and disposing of it accordingly. This includes all packaging material and any other items not being recycled or reused.
- For the duration of the project ESI will maintain a secured working facility. These security requirements are essential to success and will be strictly adhered to in an effort to safeguard any material and protect the public. When normal operations are not underway, all gates will be locked and secure. Once work operations conclude each day, all magazines shall remain secure and locked until the remaining day. Only the Material Removal and Transportation Supervisor and the Project Manager will have keys to the explosive magazines. All roadways necessary to accomplish transportation of product and disposal will be maintained by ESI for the duration of this project.
- ESI intends to use only Area-I as a disposal site. No other sites will be used to conduct disposal operations.
- ESI shall comply with all Camp Minden Installation regulations for the duration of this project.
- ESI has received a copy of the "Settlement Agreement" and will ensure each subcontractor has been provided a copy from the LMD.
- ESI will insure strict adherence to the descriptions and procedures for soil sampling and air monitoring before and after removal actions as outlined in the QAPP when submitted. Amendments to these documents will be confirmed prior to implementation.
- Access to the materials and our daily work activities will not be restricted or interrupted in any way and that areas to be utilized inside Camp Minden will be available for the duration of the removal action.
- The work schedule will consist of a 24 hour/day with 1 hour for lunch for 7 days/week. This intense schedule was chosen, primarily due to the "emergency" nature of this project.

- Storage conditions inside several of the magazines are in poor condition and a prioritization plan will be maintained throughout the project duration.
- There will be no daily time restrictions on transportation of the propellants to the on-site disposal area or for off-site recycling and/or disposal;
- Demolition, decontamination or removal of ancillary structures is not required, except as detailed in our site restoration/ demobilization phase.
- The available area that can be used for the on-site disposal operations at Area-I will be available and suitable for use;
- Roads into and out of the designated disposal site will require spot improvements to handle the amount of on-site operational traffic anticipated;
- Utilities will be available as needed (water, septic and electrical);
- Fire response will be provided by the local fire emergency departments, if needed.

ESI has chosen to locate the Disposal Unit at the old incinerator site on Camp Minden referred to as Area-I. Considerable planning went into choosing this location with the benefits of using Area-I as follows:

- The relatively remote location on Camp Minden that will not impact other on-going base operations or civilian contractors work.
- No temporary or permanent road closures other than the roadway leading to Area-I.
- Smaller environmental footprint on Camp Minden compared to E-line.
- Existing perimeter fence provides additional security for safe work operations.
- Existing roadways within Area-I fence provide access to site and reduce overall bid price.

ESI will erect a temporary sixty (60) foot by one hundred (100) foot open sided building on the Northern most portion inside the fence of Area-I. This temporary structure will provides an all-weather work site and greatly enhance our overall disposal efficiency. Lighting will be installed outside and inside of the structure to provide a means for safe work during night operations.

Community Relations

ESI will provide a public relations officer proficient and experienced in community outreach and public relations. This individual will be responsible for coordinating all community relations through the regulatory agencies (LMD, LDEQ and EPA), arranging for site visits and providing

updates and data for the community. In addition, ESI will be transparent with its information to regulatory agencies ultimately charged with dissemination to the public.

Scope of Work

The scope of work for this project will involve removal of the hazard class 1.3 propellant materials (M-6 and CBI) from the magazines, on-site disposal of the materials by thermal treatment and off-site disposal or recycle/reuse of the remaining residual ash materials and related packaging materials. Burning the propellant materials in an engineered Thermal Treatment System, including a pollution abatement system is the best possible option based on a variety of factors including worker safety, emissions, operational efficiencies and considerations for other ongoing activities at Camp Minden. The specific work tasks that will be performed to successfully complete this project will include the following:

Phase 1 – Mobilization and Site Preparation

Task 1 – Pre-Mobilization Activities including Permitting, Licensing, Ordering, and Training and Reporting

Task 2—Mobilization and Site Setup to include Environmental, Site Work, Facility Construction, and Magazine Assessment and Prioritization

Phase 2 – Removal and Disposal Operations

Task 1—Removal of Propellant Materials from Magazines and Transport to On-site Disposal Area

Task 2—On-Site Disposal of Propellant Materials

Task 3—Removal of Recycle/reuse materials

Phase 3 - Site Restoration and Demobilization

Task 1 – Environmental and Site Recovery and Restoration

Task 2—Final Reporting and Project Closeout

Phase 1 – Mobilization and Site Preparation

Upon notification from the Office of State Purchasing that ESI is the successful bidder and a contract is executed; ESI will immediately align all assets to execute the mobilization and site preparation as outlined in Phase 1 (Mobilization and Site Preparation). We expect to complete

Phase 1 within 20 weeks. Immediately, ESI will prepare and submit for approval the pre-activity sampling plan to LDEQ in order to determine background concentration of each expected constituent in compliance with RECAP. A quick turnaround on this is important to allow us to begin site preparation accordingly to support our plan.

Upon confirmation of a firm start date, ESI and El Dorado Engineering will mobilize from their respective bases to be on site at the appointed date and time. Due to the relative close proximity of Ray Bell Construction to this site, mobilization of personnel and most equipment will be completed in 1 day. Additionally, with Ray Bell Construction having a local office near the site; the needed personnel and immediate equipment to support this project are readily available.

The extensive site preparation work necessary in setting up the entire Disposal Site will require weeks to complete. Thus, ESI/ El Dorado Engineering will immediately begin site work and construction related to developing the disposal site while the fabricated equipment such as the Contained Burn Chamber or Kiln is constructed. The component with the longest lead time for fabrication, delivery, and installation is the contained burn chamber. It will be fabricated off-site, delivered and installed within twenty (20) weeks. This is only eight (8) weeks longer than the time allotted for as required by the original RFP for open burn.

A major priority of this project is to assess the stability of the materials in the magazines, their associated risk and priority for removal. Therefore, a separate ESI team will immediately begin evaluating each magazine and updating the priority list appropriately. There will be no idle time during Phase 1 mobilization operations. Prior to any site work ESI will call to locate underground utility lines so that these are marked in the disposal site at Area-I. In Louisiana the underground utility locate number is 811 or (800) 272-3020.

ESI personnel and equipment will begin site preparation (primarily for constructing the Disposal Site) which will include the needed road repairs, engineering site work, removal of vegetation if needed, and the construction of the Disposal Site. The specifics for the components of the Disposal Site are as follows:

Range Control Center – will be modular space temporary building and associated parking area near the intersection of Java Rd. and Area-I paved road. . Ray Bell Construction will perform the engineering site work installing an all-weather surface (limestone) for the placement of modular space. Once installed the occupancy permit will be obtained, utilities, phone and data supplied. We will install a weather station and close circuit video surveillance system with

cameras positioned at the disposal site. ESI will install a secured access gate at this location to control access to the disposal site at Area-I.

Access Roads and Work Areas – create all-weather access roads and working areas designated on the site map using suitable backfill and coarse rock/limestone. Once the disposal site is complete, all of the roads leading to the various magazine areas will be inspected and improved if needed to allow for access with our designated tractor/van trailers.

Disposal Unit – engineer the working surface to include drainage and all-weather roads using suitable backfill and coarse rock/limestone. Construct a suitable engineered concrete foundation for erection of the controlled burn chamber or the kiln, pollution abatement system, support structure, associated piping and controls. Install the windsock to determine wind direction.

Material Staging Area - erect a temporary sixty (60) by one hundred (100) foot engineered roof inside the Northwestern corner of the fenced area at Area-I. Under the erected roof we will install the fabricated material handling equipment to include the receiving hoppers, bins and certified scales along with positioning the appropriate roll-off containers. Remaining specialized forklifts will be delivered as well as any ancillary equipment. We will install lighting, an early warning lightning strike detection system, close circuit video surveillance and conduct a full operational checklist before commissioning.

Control Room and Motor Control Center – install a temporary modular space building with associated equipment (controls and motor control equipment) as required to operate the Disposal Unit (Contained Burn Chamber or Kiln) and Pollution Abatement System.

Explosive Storage Magazine Area – prepare an all-weather surface for placement of two (2) temporary eight (8) by eight (8) foot explosive magazines. Construct a roof over the area outside of the magazine and install a work bench.

Fuel Area – establish the fuel storage area and associated spill containment with all-weather working surface. It is important to position any refueling operations a minimum of 100 feet from the Material Staging Area. This area will be located outside the existing Area-I fence near the entry gate.

Propane Fuel Tank - install an 18,000 gallon temporary propane storage tank located a minimum of 100 feet from the material staging area. This area will also be located outside the existing Area-I fence a minimum of 50 feet from the designated Fuel Area.

At the same time ESI personnel will be conducting the remaining activities to insure that materials and equipment arrive in support of the mobilization efforts as well as preparation for Phase 2.

- The site specific Health & Safety Plan (HASP) will be completed and submitted.
- Obtain all necessary permits air, water, and waste
- Conduct a magazine assessment to amend prioritization for disposal.
- Compile all personnel certifications including training and licensing.
- Prepare and submit any other related technical documents and reports, as required.
- Procure all equipment, fixed, mobile, tools and consumables
- Establish utilities, sewer, water, electricity, data
- Install all appropriate warning signs to delineate all safety aspects related to the project and delineate established transportation routes.

The assets (personnel and equipment) involved in the initial mobilization, as well as the actual conduct of the site preparation activities, are geared to support the overall project productivity and safety goals. Furthermore, this phase of the project will insure adequate support and setup to enable the timely, efficient and safe operations involving the critical project tasks of removing the material from the magazines, transporting these to the disposal site and the final disposal of the materials.

Personnel:

In support of the work required for Phase 1, ESI along with Ray Bell Construction will mobilize personnel to operate the required heavy equipment needed in support of this phase of the project. All of the needed heavy equipment to support the construction will be delivered to the site and inspected a minimum of three (3) days prior to actual site work

At the same time that we are mobilizing and building the site, the following equipment and supplies will have been ordered with enough lead time such that these will be on-site.

Equipment:

2 - LP Low Mast 360° Rotating Fork Forklifts (for material removal inside magazines) with DOD compliant spark arrestor

1 –Low Mast 360° rotating forklift attachment with DOD compliant spark arrestor and hydraulic top arm fitted with fiberglass reinforced plastic, (FRP) grating for Material Staging Area.

1 – Low Mast 6 ton forklift with DOD compliant spark arrestor for Material Staging Area

2 -All-Terrain 8-ton Tele handler Forklifts with DOD compliant spark arrestor for loading material for transport at magazines

1 - Range Control Modular Space

1 - Ottawa Terminal Tractors (Material Transport)

3 – Curtain Side Trailers for material transportation

4 - Portable Toilets

2 - Hand-wash Stations (1 each at the Break Area and Material Staging)

2 - MultiRae Units (magazine interior air monitoring)

4 - P/U Trucks for personnel transport

Level D PPE Items (specific listing follows in next section)

Decontamination supplies and materials (non-sparking)

1 - Skid-Steer (road repair and needed maintenance at magazines or at the Disposal Site)

12 – Steel burn trays (each 5-ft x 8-ft x 12-in.-high for Contained Burn Chamber only)

1 – Control Room and Motor Control Center with associated controls and equipment

1 - Crew Cab Universal Terrain Vehicles (UTVs)

2 - Type II Licensed Explosive Magazines

2 - Type III Explosive Magazines (day boxes) and blasting equipment

1 -Portable generators

1 - Portable welding machine

4 - Backpack fire-fighting sprayers with FFF fire-fighting foam

12 - Class III portable fire extinguishers

Non-sparking hand tools

Safety equipment and supplies (PPE, gloves and face shields)

1 - Portable Weather Station (to be installed at Range Control Facility)

5 - Lightning Detectors

Final mobilization activities to be completed in Phase 1 will include installing one (1) early warning lightning detection system and weather station at the Area-I Disposal Site. Also we will provide lightning strike detectors on the Ottawa terminal tractor, the critical magazine teams, the Material Staging Team and Disposal Unit Team.

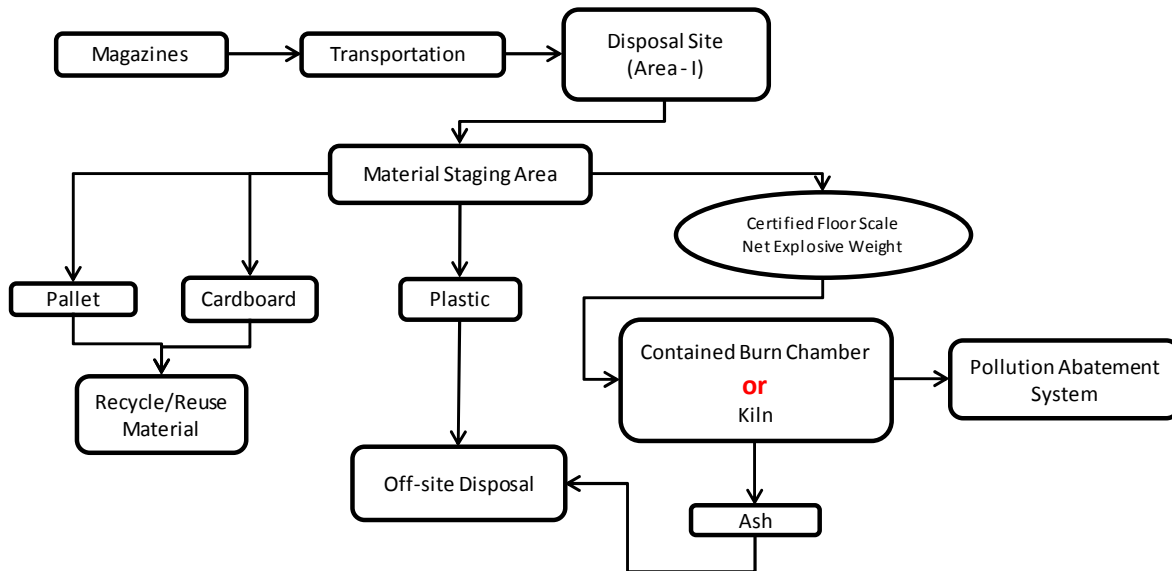
The critical magazine teams will have their tool kits completed and inventoried to include all PPE, tools and equipment detailed in the magazine removal and transportation section. We will stage and prepare the necessary critical magazine team's equipment (LP 360° rotating-fork forklifts, 8Ton All-Terrain tele-handler forklift and team P/U Truck & tools, PPE, and MultiRae Air Monitor). Curtain-side trailers will be staged as needed at the highest priority magazines in preparation for commencement of removal activity as soon as the disposal site is inspected and commissioned.

Test/Trial Burn and Stack Monitoring

If required by the environmental permit, stack testing will be performed upon commissioning of the system to verify compliance with the permit requirements. Stack sampling would consist of three (3) replicate samples during operations of the thermal treatment system at the full production rate. It is expected that stack testing would include a measurement of the average stack concentration levels of carbon monoxide (CO), Total Hydrocarbon (THC), and particulate matter (PM). Measurement of speciated principal organic hazardous constituents (POHC) may also be performed, which would include sampling for dinitrotoluene (DNT), dibutylphthalate, and diphenylamine. A continuous emissions monitoring system may also be utilized to continuously monitor stack emissions, if required by the permit. If utilized, this system will include initial calibration and verification checks as well as daily automated calibration checks.

Phase 2 (Removal and Disposal Operations)

The goals of this phase of the project are centered on the safest and most efficient removal of the materials from the magazines through final disposal at the disposal site located at Area-I. Safety is paramount for any project and this is especially so for this project due to the nature of the material and the resultant explosive hazard.



Overall Process Flow

ESI plans to remove the materials with specialized handling equipment from the magazines and transport the material in curtain-side trailers with a specialized Ottawa terminal type tractor capable of making quick connect and disconnect to multiple trailers. Once loaded, manifested and secured the tractor trailer will deliver the materials to the Disposal Site located at Area-I and position the trailer at the Material Staging Area.

The Material Staging Area will separate the packaging material and place the propellant materials into receiving hoppers designed to handle a pre-determined amount of material depending on which technology is employed as the disposal unit. The filled transfer bin will be weighed on a heavy duty floor scale to determine net explosive weight and then transported to the disposal unit.

Depending on which disposal technology is used the contents of one transfer bin will be placed in one cold 5' X 8' by 12" high burn tray for processing in the contained burn chamber or into the feed hopper for the kiln. The empty bins will be returned to the Material Staging Area to be re-filled, weighed and the process repeated. The weigh tickets from the individual transfer bins will be tallied, retained and reported according to the respective disposal events.

$$\text{Net explosive weight} = \text{material} + \text{hopper weight} - \text{tare weight of hopper}$$

The packaging waste will be segregated at the Material Staging Area-Inside Area-I and the cardboard and pallets collected for recycle/reuse while the plastic materials collected and

profiled for off-site disposal. The residual ash from the treatment of the materials is not expected to exceed 0.2% by volume and will be collected as needed and stored in a covered roll-off container for profiling and disposal.

Rate Controlling/Limiting Concerns

Specialized Equipment

Using specialized equipment such as the 360° rotating fork forklift, we will be able to safely remove shifted pallets from the top of stacks inside the magazine. We will use multiple curtain-side trailers and one (1) Ottawa-type terminal tractors capable of quickly coupling to these trailers in minutes. These tractors have a door in the rear of the cab allowing the driver to connect the air hoses without exiting the cab and actuate the fifth wheel coupler from within the cab. This approach is used in terminals moving multiple trailers throughout the day quickly and efficiently.

At the material staging area we will erect a temporary building 60' wide and 100' long to keep our personnel out of the weather as they un-package the materials. We designed aluminum receiving hoppers with the flexibility to receive the various packaging configurations from super-sacks to boxes.

Our transfer bins which are center-flow containers are the most efficient, versatile containers available to transport and dispense granular/pelletized materials. The smooth, funnel-shaped interior has a 35° angle for efficient flow of the M-6 & CBI contents. Their design allows for complete emptying of the contents at the disposal unit.

We have added ergonomically engineered equipment like the spring loaded 360° rotating pallet leveler to assist the workers unloading boxes. Also, we are reducing fatigue on our workers from handling the numerous cardboard drums by using a forklift equipped with a special 360° rotating fork attachment with hydraulic top arm fitted with fiberglass reinforced plastic, (FRP) grating. They will be able to safely unload six (6) cardboard drums without removing them from the pallet. By separating the package material from the propellant materials at the material staging area we never clutter the disposal unit area and will not need to transport the packaging more than a few feet to prepare for off-site reuse/recycle or disposal.

Resource Alignment

Throughout our removal and disposal actions we will continually monitor the efficiency of the four (4) major tasks to include the removal from the magazines, transport, material staging and

preparation, and disposal. We will move equipment and personnel to address any rate limiting or controlling task.

Disposal Methodology

Clean Burning Igniter (CBI) – to initiate M-6

As part of ESIs' daily disposal process, we will use Clean Burning Ignitor, (CBI) for thermal boosters to initiate each burn event in the contained burn chamber disposal unit. CBI is much cleaner burning than black powder, normally used to initiate disposal operations. Using CBI in this manner will reduce the number of CBI burn events because we are using CBI throughout the disposal of M-6.

Primary Exposure Pathways

This section characterizes the various pathways (i.e., environmental media) that may be impacted by M6 demilitarization operations at Camp Minden. This section also provides an evaluation of the likelihood of and/or expected degree of impact for each pathway described, in order to assess the amounts of contaminants that may reach receptors.

Soil Pathway

There are no releases to soil from operations at the disposal site. Residue in the contained burn chamber or kiln is periodically removed and disposed off-site in sealed drums. Both configurations (contained burn chamber or kiln) are loaded in a covered area over a concrete pad. Sealed collection drums will be used in the PAS under the cyclone and the bag-house, again over a concrete pad. No dumping of drums into other containers is required. These drums will be profiled and disposed accordingly off-site conforming to all regulatory requirements. Our experience in disposal of M-6 through thermal treatment done both domestically and internationally resulted in only small amount of M-6 ash remaining (~0.2% by volume) after treatment. In every case the analytical results of this ash were Non-Hazardous and suitable for landfill. Operational procedures are detailed in Phase 2 discussion. As described, by design there is no release to soil from operations.

Soil-to-Groundwater Pathway

The potential for the constituents of concern to reach groundwater is negligible because wastewater is not generated from the operations of the contained burn chamber or kiln. Therefore, by design no releases to the soil are anticipated.

Groundwater Pathway

Because there are no constituents of concern released to the soil, there is no potential for pollutants to migrate to the groundwater.

Surface Water Pathway

Because there are no constituents of concern released to the soil, there is no potential for pollutants to be carried through runoff to surface water bodies.

Air Pathway

During operations, constituents of concern enter directly into the air through stack emissions. The Air Pollution Abatement System (PAS) employs Best Available Control Technology (BACT), as described in detail in the technical proposal. The air emissions, by design, incorporate BACT to keep potential discharge minimal, well below regulatory standards and limits for population exposure.

Environmental Performance Standards

Performance standards will be established and maintained for the protection of human health and the environment from activities at the facility. The following sections explain the performance standards.

Performance Standards for Protection of Surface Water, Wetlands, and Soil Surfaces

Both the contained burn facility and/or kiln have been designed to eliminate any direct releases to surface water, wetlands, and soil at the site. Therefore, performance standards for protection of surface water, wetlands, and soils are not relevant.

Performance Standards for Protection of the Atmosphere

Air emissions modeling analysis will be performed using the PAS as described herein to evaluate fence-line concentrations of constituents in gaseous emissions. This modeling will be the basis of the performance standard to show that emissions are well below concentrations equivalent to 1/100th of TLVs for these compounds, showing very minimal exposure to the population.

Magazine Approach

Personnel

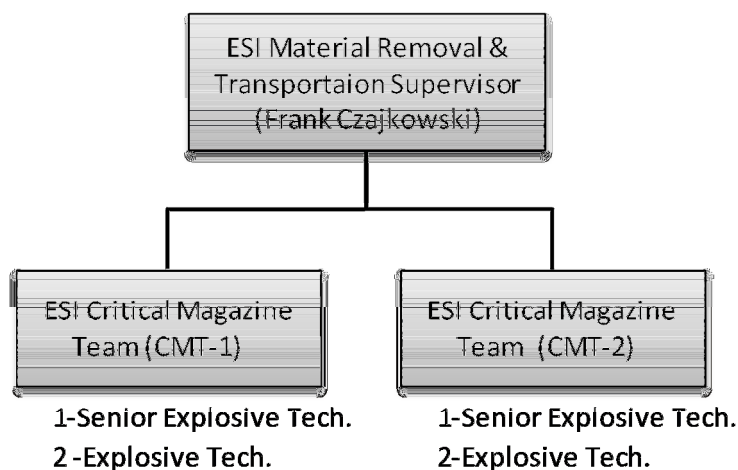
ESI has spent significant time and effort developing safe procedures for removal of the hazardous materials namely M-6 propellant and Clean Burning Igniter (CBI). Our approach is designed to minimize personnel exposure while maximizing efficiency of material removal. Each critical magazine team will work independently from one another with their own tools and equipment at safe separation distances.

These critical magazine teams will consist of two – three (3) man teams as follows:

Senior Explosive Technician with eight (8) years or more experience providing supervision of all activity at magazine to include assessment of material stability and movement activity throughout the removal process. Responsible for the documentation of materials removed from magazine, security, implementing task specific job safety analysis, (JSA).

Two (2) Explosive Technician /Forklift Operators licensed as an explosive handlers with greater than five (5) years' experience handling explosives and operating a forklift. One assigned to remove material inside the magazine while the other loads the curtain-side trailers outside.

These two Critical Magazine Teams, (CMT's), will focus on removal of material from the highest priority magazines designated in our Magazine Prioritization Plan, (MPP). Each CMT will have the most experience personnel in their intended roles out of our staff. This approach will support sustained flow of material to the disposal site ensuring ESI's disposal goals are maintained. Flexibility of the teams to work together to address super critical magazine conditions uncovered throughout the process will be vital to our safe and successful completion of this task



Magazine Removal Team

Equipment:

Each magazine team will have specialized equipment to insure the safe and efficient removal of the various material packaging types. We will stage curtain-side enclosed trailers at each working magazine along with a Tele-Handler forklift for loading. Inside the magazine, the team will use a DOD compliant propane powered 360° rotating fork, low-mast forklift capable of reaching the highest pallet of material.

Inside Magazine



LP- Low Mast 360° Rotating Fork Forklift with DOD
Compliant Spark Arrestor

Outside Magazine



8-Ton Tele-Handler All-Terrain Forklift with DOD
Compliant Spark Arrestor

Magazine Equipment

Procedure

Step 1 - ESI Critical Magazine Teams move to highest priority magazine for initial entry inspection. Tool kit includes soft bristle broom, plastic dust pan, empty drum or box container, mop and plastic bucket, tape, plastic wrap, plastic scoops, empty drums and super sacks, MultiRae meter, portable fire extinguishers (2), wasp spray, first aid kit, ratchet straps, and orange cones. PPE includes 100% cotton coveralls, cotton undergarments, hard hats, steel toed shoes, safety glasses/face shields, and leather gloves.

Step 2 - Place orange cones and signage in road to identify magazine work in progress.

Step 3 - Inspect magazine roof vent and make sure it is open. Use caution in walking up magazine cover to inspect roof vent. Watch for venomous snakes, scorpions, spiders, and wasps and use wasp spray if needed.

Step 4 - Inspect magazine apron and outside access for any loose material. Collect any loose material on ground into a lined cardboard drum container for transport to Disposal Site.

Step 5 - Once outside of the magazine is cleared of any loose material, inspect the magazine door and door frame for any wasps, spiders, scorpions, or snakes and remove if needed.

Step 6 - Unlock and open magazine door. Use caution to avoid muscle strain or pinching body parts in door. Watch for scorpions, spiders, wasps, and snakes around door and door frame and remove if needed.

Step 7 - Monitor oxygen level with MultiRae PID device equipped with the following sensors: Lower Explosive Limit (LEL); Oxygen (O₂); Carbon Monoxide (CO); Nitric Oxide (NO); and, Nitrogen Dioxide (NO₂). Air monitoring logs will be maintained throughout the day, before and during the time that the crews are working. The air monitoring and magazine unloading activities will comply with the site specific HASP and will address all chemical exposure concerns and the resulting PELs/TWA as follows (i.e., meeting the most stringent exposure limit set by either OSHA or NIOSH):

Nitric Oxide: 25 ppm (both OSHA and NIOSH)

Nitrogen Dioxide: 1 ppm by NIOSH

Oxygen: 19.5%-20.5% (OSHA)

Carbon monoxide: 35 ppm (NIOSH)

Lower Explosive Limit: 10% of the LEL is considered safe working conditions (NIOSH)

Step 8 - Place fire extinguishers (2) in safe accessible location. Inspect magazine floor for loose material and collect any loose material in lined cardboard drum for transport to Disposal Site.

Step 9 - Inspect magazine floor for water and remove any water on floor with mop and bucket.

Step 10 - Inspect magazine material storage conditions and develop plan for addressing crushed containers or leaning stacks. Manually apply ratchet straps as needed to secure crushed containers or leaning stacks.

Step 11 - Once magazine material removal plan is completed, the ESI Critical Magazine Team will begin working to remove all crushed containers or leaning stacks.

Step 12 - Obtain LP forklift to begin container removal. Caution: Operate forklift inside magazine only as needed to remove containers. There will be a "no idle policy" enforced inside the magazine. Sampling oxygen and carbon monoxide using the MultiRae meter while operating the forklift inside the magazine and stop operations if safe levels are exceeded.

Step 13 - Move any good containers needed for safe access to magazine apron for placement on trailer to transport to Disposal Site. Operating philosophy for all material removal teams will

be if material containers are moved, the material containers will be placed on trailer for transport to the Disposal Site.

Step 14 - Inspect each container and pallet for integrity to be transported without leaking.

Step 15 - The 8-Ton Tele-Handler, All-Terrain forklift will operate outside the magazine and will move material containers from the apron to the trailer.

Step 16 - When leaking or damaged material containers are identified, the Critical Magazine Team will assess for corrective action following a decision priority as follows:

- a) Clean up any loose spilled material with soft bristle broom and plastic dust pan. Repair the broken or damaged container with tape and plastic.
- b) If the container damage is beyond repair, use a good over pack container such as the super sack to contain the damaged container.

Step 17 - If the container cannot be repaired or over packed, then the team will temporarily patch or repair the container leak with tape and plastic and move the container outside the magazine. The damaged container will be moved onto the magazine apron and the magazine door will be closed and secured with the crew all outside them per DOD 4145.26-M. The material will then be transferred into a lined cardboard drum or super sack using non-sparking scoops until complete.

Step 18 - Inspect the repaired/over packed/transferred container for structural integrity and have the container moved by forklift to the trailer for transport to the Disposal Site.

Step 19 The Critical Magazine Team will then begin inspection and removal of good containers for transport to the Disposal Site.

Step 20 - When a magazine is clear of all containers, ESI will conduct a final clean-up to include sweeping the magazine floor using soft bristle broom and plastic dust pan and collecting any loose material. Any loose materials will be placed in a lined cardboard drum and transported to the Disposal Site. A final outside inspection will be conducted for any loose material and if found it too will be placed in a lined cardboard drum for transport to the Disposal Site.

Step 21 - The ESI Health and Safety Manager will then call the designated State of Louisiana, Military Department POC for a final magazine inspection and approval to close out. Upon acceptance, ESI will issue a certificate of closure for the magazine and return custody back to the Louisiana Military Department.

Notes:

- a. If lightning evacuation is directed, all ESI critical magazine teams and personnel will evacuate immediately to the Range Control Center until an all clear is given.
- b. If any unusual condition or near miss accident occurs, the ESI Project Manager and ESI Health and Safety Manager will be notified immediately.
- c. Any ESI personnel have the authority to issue a stop work order and the ESI Project Manager and ESI Health and Safety Manager will be notified immediately for assessment of conditions.
- d. No matches, lighters, or any other flame or heat producing devices will be taken into the Magazine Areas without a “hot work” permit issued by the ESI Health and Safety Manager. At no time will smoking be conducted in any area other than a designated smoking area.
- e. Any accident or injury will be initially treated with first aid by ESI team members. The ESI Project Manager and ESI Health and Safety Manager will be notified immediately for contacting Emergency Response.

Compromised Magazine Approach – Spilled/ Leaning/ Fallen

ESI is very familiar with the conditions of the materials in the magazines and has developed an approach consistent with all State and Federal regulations including DOD 4145.26-M. Our approach is to have our most experienced personnel formed into two Critical Magazine Teams to address the compromised magazines. When leaking or damaged material containers are identified, these teams will assess for corrective action following a decision priority as follows:

Spilled or Leaking

- Clean-up any loose or spilled material with a soft bristle broom and non-sparking plastic or aluminum dust pan. Continue to repair the broken or damaged container with tape and plastic if possible.
- If the container damage is beyond repair, use a good over pack container such as the super sack to contain the damaged container if possible.
- If the container cannot be repaired or over packed, then the team will temporarily patch or repair the container leak with tape and plastic and move the container outside the apron of the magazine away from the door.

- The magazine apron and the magazine door will be closed and secured with the crew all outside them per DOD 4145.26-M. All equipment engines will be off prior to any re-packaging.
- The material will then be transferred into a lined cardboard drum(s) or super sack using non-sparking scoops until complete for transport to the Disposal Site.

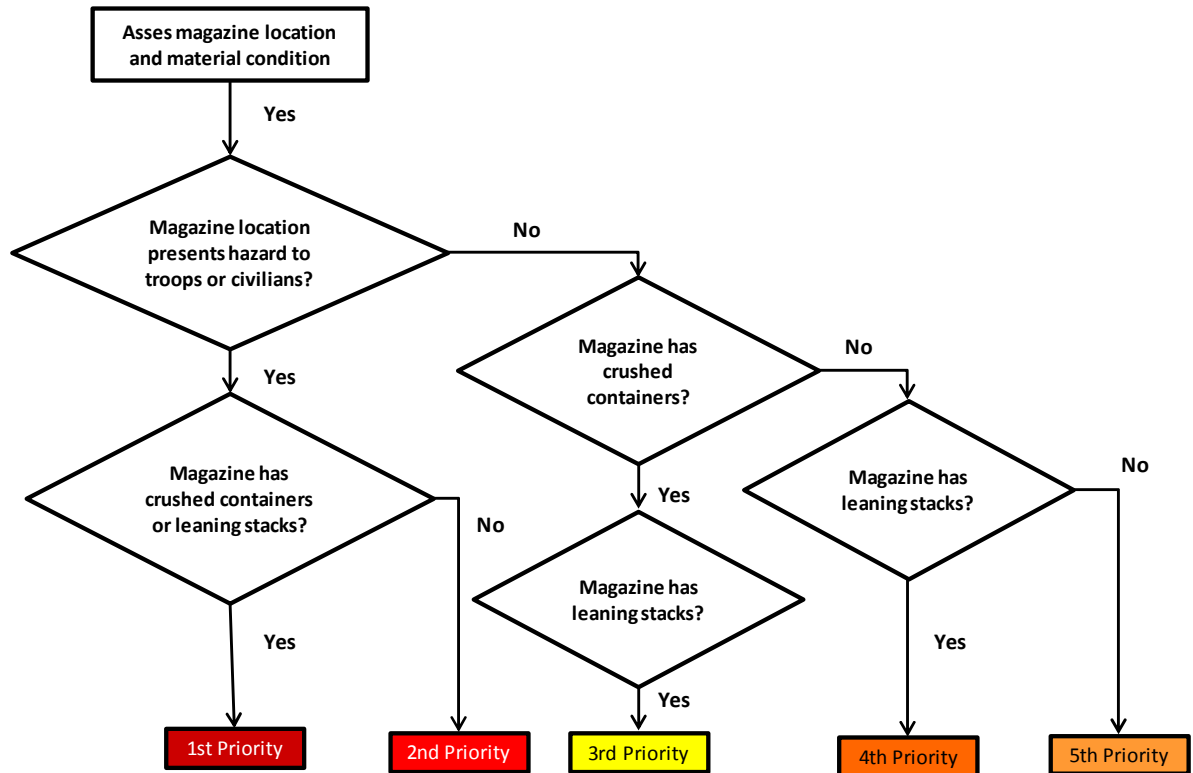
Leaning / Falling

Many pallets of material are stacked four (4) and even five (5) high exceeding ATFE, LSP and DOD magazine storage regulations/requirements. This creates a hazardous working environment and poses imminent danger to personnel requiring great care to safely remove.

- Manually apply ratchet straps as needed to secure crushed containers or leaning stacks to allow for safe removal of the top pallet using the 360° rotating-fork forklift.
- Move the pallet outside to the apron for loading on the trailer.
- Repeat the process and remove the ratchet straps accordingly as the threat is reduced for falling.

Magazine Prioritization

ESI has developed the following magazine prioritization approach based on the physical stability in the storage magazines and proximity to military or commercial operations. This decision matrix will be employed throughout the length of the contract to insure the highest degree of safety.



Magazine Priority Decision Matrix

During Phase 1 (Mobilization and Site Preparation) our team will conduct another assessment and update the magazine prioritization plan accordingly. ESI will also conduct periodic assessment of the storage magazines throughout the duration of the contract and amend the prioritization plan accordingly. ESI will notify the Louisiana Military Department of any amendments to the plan. Our Material Removal and Transportation Supervisor will be responsible for maintaining and reviewing daily with the project team. This magazine prioritization plan will be evergreen in that it will be continually amended to address priority hazards as they change throughout the course of the project.

The following was developed from information provided in the RFP dated December 8, 2014 and is intended as an initial magazine priority plan. This plan identifies four (4) magazines in Area L-2, (2478, 2474, 2475, and 2471) which currently exceed published storage capacities (violation of safe separation distances between magazines). Additionally, six (6) other magazines pose a significant threat to personnel due to their proximity to military and commercial operations (Area M, or Area T-6) and poor storage conditions as shown below. ESI plans to start by removing material from these nine (9) Priority #1 magazines.

ESI Magazine Priority

This plan identifies four (4) magazines in Area L-2, (2478, 2474, 2475, and 2471) which currently exceed published storage capacities (violation of safe separation distances between magazines). Additionally, six (6) other magazines pose a significant threat to personnel due to their proximity to military and commercial operations (Area M, or Area T-6) and poor storage conditions as shown below. ESI plans to start by removing material from these nine (9) Priority #1 magazines.

Priority	Magazine	Area	Door	Floor Water	NEW	Containers	Condition	Stacks
1	2478	L-2	Double	No	203,606#	185 S/S, 2 pallets - 120# dr., 1 pallet 121#dr., 69 pallets - 140# dr.	Poor & violates mag. limits and distance to 2440 & 2441	Crushing
1	2474	L-2	Double	Yes	193,920#	102 S/S, 124 pallets- 140#dr.	Poor & violates mag. limits and distance to 2472 & 2428	Crushing
1	2475	L-2	Double	Yes	163,680#	33 pallets-60# bx., 63 pallets-140# dr., 47 pallets-140# dr.	Poor and violates mag. limits and distance to Mag 2431 and Mag 2432	Crushing
1	2471	L-2	Double	Yes	132,611#	40 S/S, 91-pallets CBI, 6-pallets 140# dr.	Good, but violates mag. limits and distance to Mag 2423 and Mag 2424	Good
1	501	L-4	Single	No	293,760#	136 pallets-60# bx.	Poor and causes risk to Areas M and T-6	Crushing
1	505	L-4	Single	No	259,920#	99 S/S, 80 pallets-60# bx.	Poor and causes risk to Areas M and T-6	Crushing
1	503	L-4	Single	No	299,440#	4 S/S, 137 pallets-60# bx.	Fair, but causes risk to Areas M and T-6	Leaning

Priority	Magazine	Area	Door	Floor Water	NEW	Containers	Condition	Stacks
1	506	L-4	Single	No	299,200#	16 S/S, 132 pallets-60# bx.	Fair, but causes risk to Areas M and T-6	Leaning
1	507	L-4	Single	No	299,040#	6 S/S. 136 pallets-60# bx.	Fair, but causes risk to Areas M and T-6	Leaning
1	508	L-4	Single	No	298,080#	138 pallets-60# bx.	Fair, but causes risk to Areas M and T-6	Leaning

At this point, ESI will have completed the ten (10) “most critical” Priority 1 magazines and will move to the Priority 2 magazines. The magazines are still in the L-4 area and present a risk to the training (T-6) area and the commercial operations at Area M, but are reported in good storage condition. These three (3) magazines are identified as Priority #2.

Priority	Magazine	Area	Door	Floor Water	NEW	Containers	Condition	Stacks
2	502	L-4	Single	No	299,040#	6 S/S, 136 pallets-60# bx.	Good, but causes risk to Areas M and T-6	Good
2	509	L-4	Single	Yes	295,920#	137 pallets-60# bx.	Good, but causes risk to Areas M and T-6	Good
2	504	L-4	Single	No	251,120#	89 S/S, 80 pallets- 60# bx.	Good, but causes risk to Areas M and T-6	Good

At this point, ESI will have completed removal from thirteen (13), Priority 1 – 2 magazines and will proceed to Priority 3 magazines associated with L-2 and L-3 areas. Priority 3 magazines are reported as having “crushed containers”. ESI considers crushed containers as a more severe container condition to address immediately.

Priority	Magazine	Area	Door	Floor Water	NEW	Containers	Condition	Stacks
3	2408	L-2	Single	No	146,080#	166 S/S	Poor	Crushing
3	2409	L-2	Single	No	145,200#	165 S/S	Poor	Crushing
3	2418	L-2	Single	No	146,080#	166 S/S	Poor	Crushing
3	2425	L-2	Single	No	124,960#	142 S/S	Poor	Crushing
3	2433	L-2	Single	No	124,960#	142 S/S	Poor	Crushing

Priority	Magazine	Area	Door	Floor Water	NEW	Containers	Condition	Stacks
3	2302	L-3	Single	No	145,200#	165 S/S	Poor	Crushing
3	2363	L-3	Double	No	124,960#	142 S/S	Poor	Crushing
3	2405	L-2	Single	No	124,080#	141 S/S	Poor	Crushing
3	2406	L-2	Single	Yes	120,560#	137 S/S	Poor	Crushing
3	2422	L-2	Single	No	135,520#	154 S/S	Poor	Crushing
3	2477	L-2	Double	No	145,840#	97 S/S, 14 pallets-60# bx.	Poor	Crushing
3	2328	L-3	Single	No	124,560#	90 S/S, 54 pallets-60# bx.	Poor	Crushing
3	2322	L-3	Single	No	241,520#	83 S/S, 78 pallets-60# bx.	Poor	Crushing
3	2301	L-3	Single	No	227,680#	82 S/S, 72 pallets-60# bx.	Poor	Crushing
3	2416	L-2	Single	Yes	124,400#	80 S/S, 25 pallets-60# bx.	Poor	Crushing
3	2470	L-2	Double	No	124,960#	142 S/S	Poor	Crushing
3	2468	L-2	Double	Yes	103,840#	118 S/S	Poor	Falling
3	2429	L-2	Single	No	259,200#	120 pallets-60# bx.	Poor	Crushing
3	2428	L-2	Single	No	124,876#	86 pallets-121# dr., 38 pallets-140# dr., 49 pallets-140# dr.	Poor	Crushing
3	2473	L-2	Double	Yes	96,800#	110 S/S	Poor	Crushing
3	2435	L-2	Single	No	166,320#	198 pallets-140# dr.	Poor	Crushing
3	2476	L-2	Double	Yes	124,960#	142 S/S	Poor	Crushing
3	2439	L-2	Single	No	124,710#	12 pallets-100# dr., 6 pallets-120# dr., 105 pallets-121# dr., 52 pallets-140# dr.	Poor	Crushing
3	2310	L-3	Single	No	124,160#	80 S/S, 64 pallets-140# dr.	Poor	Falling

Priority	Magazine	Area	Door	Floor Water	NEW	Containers	Condition	Stacks
3	2318	L-3	Single	No	197,400#	235 pallets-140# dr.	Poor	Crushing
3	2364	L-3	Double	Yes	124,960#	142 S/S	Poor	Crushing
3	2323	L-3	Single	No	291,600#	135 pallets-60# bx.	Poor	Crushing
3	2417	L-2	Single	No	287,520#	42 S/S, 116 pallets-60# bx.	Poor	Crushing
3	2469	L-2	Double	Yes	124,784#	30 pallets-100# dr., 4 pallets-121# dr., 58 pallets-140# dr., 85 pallets-140# dr.	Poor	Crushing

At this point, ESI will have completed removal from forty-two (42) Priority 1 - 3 magazines and will proceed to the Priority 4 magazines. Priority 4 magazines are reported to have leaning stacks and require timely action for disposal.

Priority	Magazine	Area	Door	Floor Water	NEW	Containers	Condition	Stacks
4	2424	L-2	Single	No	124,960#	142 S/S	Fair	Leaning
4	2438	L-2	Single	No	124,960#	142 S/S	Fair	Leaning
4	2411	L-2	Single	No	124,080#	141 S/S	Fair	Leaning
4	2401	L-2	Single	No	246,320#	86 S/S, 79 pallets-60# bx.	Fair	Leaning
4	2419	L-2	Single	Yes	120,960#	CBI	Fair	Leaning
4	2430	L-2	Single	No	221,240#	29 S/S, 205 pallets-140# dr., 42 pallets-140# dr.	Fair	Leaning
4	2472	L-2	Double	No	124,080#	141 S/S	Fair	Leaning
4	2441	L-2	Single	Yes	124,960#	142 S/S	Fair	Leaning
4	2442	L-2	Single	Yes	146,080#	166 S/S	Fair	Leaning
4	2311	L-3	Single	No	253,040#	20 S/S, 109 pallets-60# bx.	Fair	Leaning
4	2306	L-3	Single	No	242,760#	289 pallets-140# dr.	Fair	Leaning
4	2329	L-3	Single	No	124,320#	148 pallets-140# dr.	Fair	Leaning

Priority	Magazine	Area	Door	Floor Water	NEW	Containers	Condition	Stacks
4	2324	L-3	Single	No	204,480#	252 pallets-140# dr.	Fair	Leaning
4	2402	L-2	Single	No	238,760#	111 pallets-60# bx.	Fair	Leaning
4	2421	L-2	Single	No	196,680#	45 S/S, 57 pallets-140# dr.	Fair	Leaning

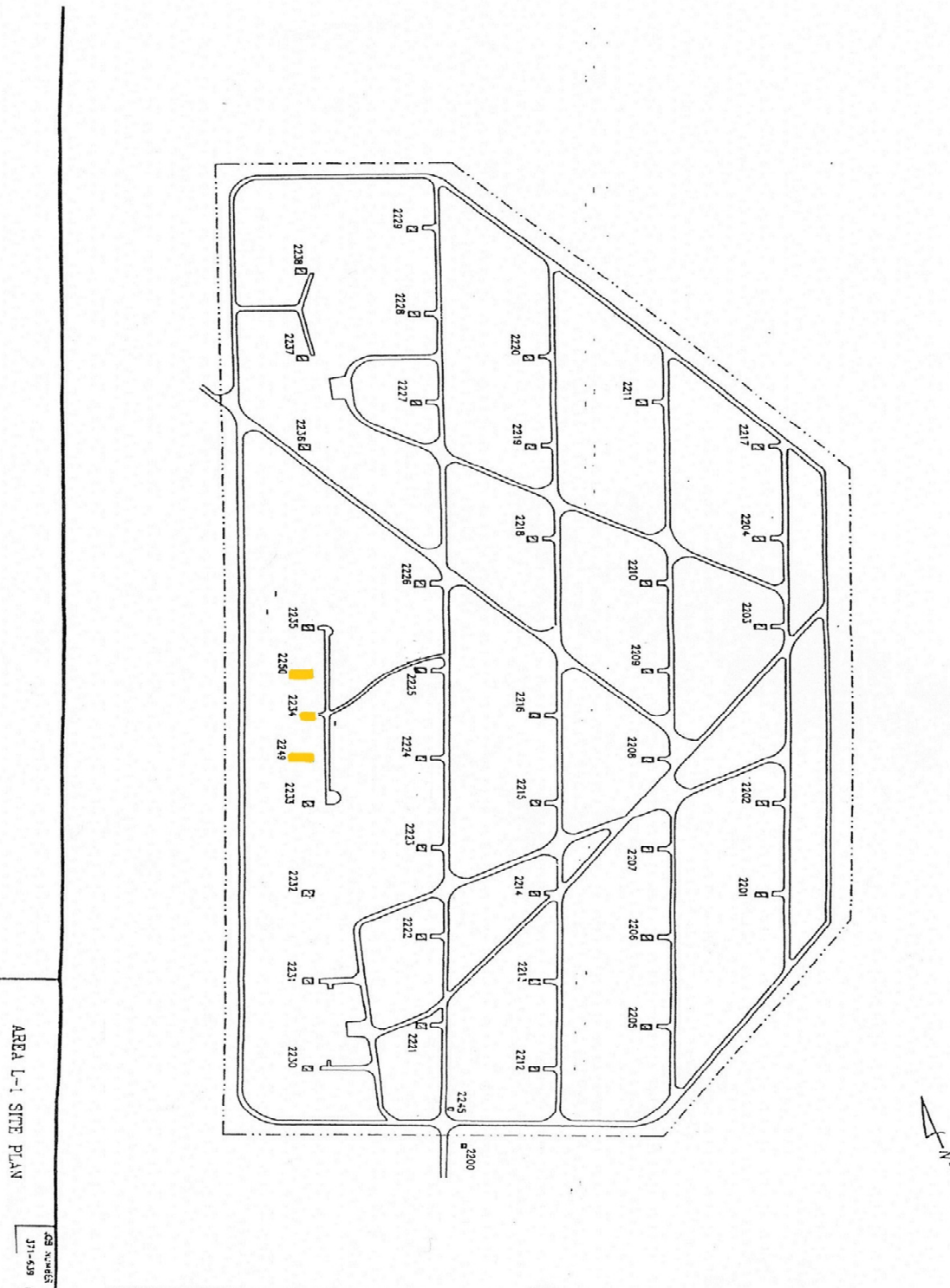
At this point, ESI will have completed removal from fifty-seven (57) Priority 1-4 magazines and will proceed to work on the Priority 5 magazines. The Priority 5 magazines are reported to have good storage conditions and require timely attention for disposal.

Priority	Magazine	Area	Door	Floor Water	NEW	Containers	Condition	Stacks
5	2234	L-1	Single	No	94,160#	107 S/S	Good	Good
5	2249	L-1	Double	No	124,960#	142 S/S	Good	Good
5	2250	L-1	Double	Yes	124,960#	142 S/S	Good	Good
5	2467	L-2	Double	No	124,960#	142 S/S	Good	Good
5	2413	L-2	Single	No	124,960#	142 S/S	Good	Good
5	2426	L-2	Single	No	124,960#	142 S/S	Good	Good
5	2427	L-2	Single	No	124,960#	142 S/S	Good	Good
5	2407	L-2	Single	No	238,560#	114 S/S, 64 pallets-60# bx.	Good	Good
5	2325	L-3	Single	No	242,400#	84 S/S, 78 pallets-60# bx.	Good	Good
5	2403	L-2	Single	No	242,800#	82 S/S, 79 pallets-60# bx.	Good	Good
5	2304	L-3	Single	No	238,480#	82 S/S, 79 pallets-60# bx.	Good	Good
5	2308	L-3	Single	No	240,640#	82 S/S, 78 pallets-60# bx.	Good	Good
5	2420	L-2	Single	No	124,400#	80 S/S, 25 pallets-60# bx.	Good	Good
5	2410	L-2	Single	No	202,080#	48 S/S, 74 pallets-60# bx.	Good	Good

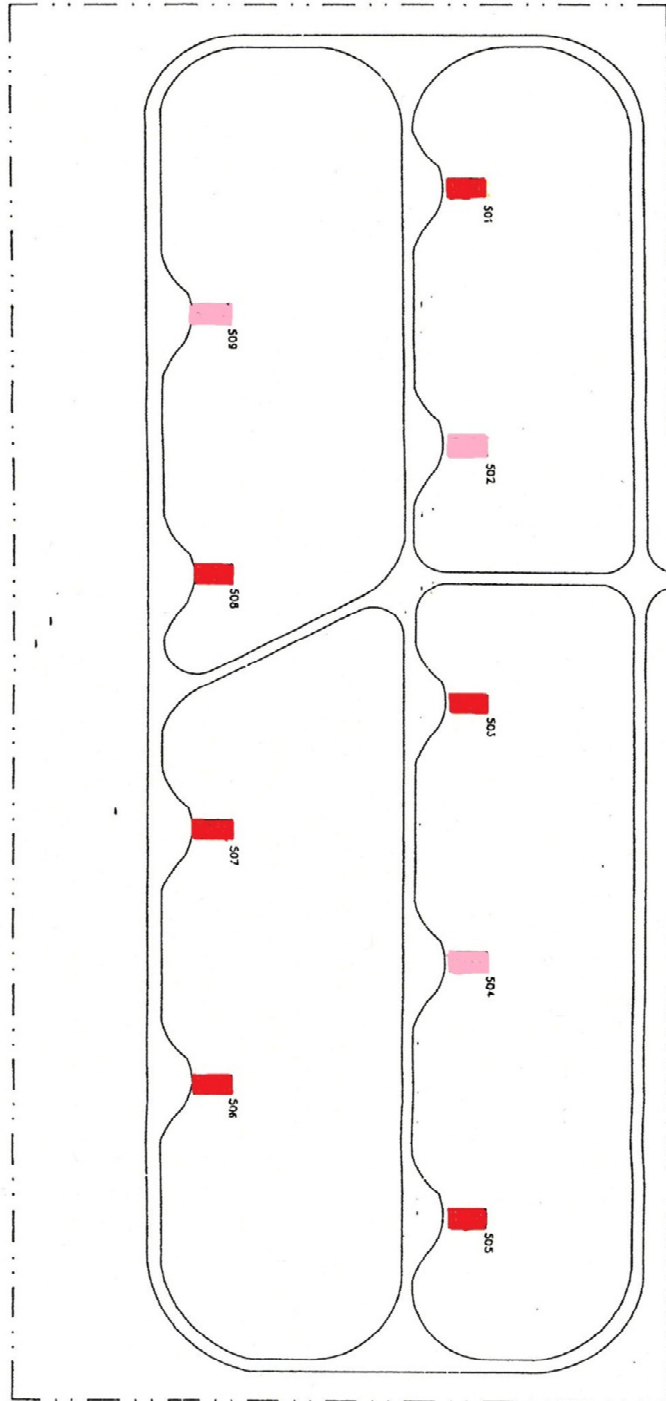
Priority	Magazine	Area	Door	Floor Water	NEW	Containers	Condition	Stacks
5	2414	L-2	Single	No	238,086#	5 pallets-100# dr., 1 pallet-121# dr., 279 pallets-140# dr.	Good	Good
5	2423	L-2	Single	No	124,400#	80 S/S, 25 pallets-60# bx.	Good	Good
5	2437	L-2	Single	No	240,240#	286 pallets-140# dr.	Good	Good
5	2436	L-2	Single	No	299,440#	31 S/S, 126 pallets-60# bx.	Good	Good
5	2434	L-2	Single	No	124,600#	45 S/S, 116 pallets-140# dr.	Good	Good
5	2432	L-2	Single	No	114,336#	99 pallets-CBI	Good	Good
5	2431	L-2	Single	No	124,400#	80 S/S, 25 pallets-60# bx.	Good	Good
5	2440	L-2	Single	No	124,400#	80 S/S, 25 pallets-60# bx.	Good	Good
5	2443	L-2	Single	No	216,922#	49 pallets-60# bx., 1 pallet-100# dr., 3 pallets-121# dr., 2 pallets-140# dr., 115 pallets-140# dr.	Good	Good
5	2303	L-3	Single	No	242,800#	82 S/S, 79 pallets-60# bx.	Good	Good
5	2312	L-3	Single	No	259,200#	120 pallets-60# bx.	Good	Good
5	2321	L-3	Single	No	124,400#	80 S/S, 25 pallets-60# bx.	Good	Good
5	2320	L-3	Single	No	124,040#	80 S/S, 25 pallets-60# bx.	Good	Good
5	2319	L-3	Single	No	124,400#	80 S/S, 25 pallets-60# bx.	Good	Good

Priority	Magazine	Area	Door	Floor Water	NEW	Containers	Condition	Stacks
5	2317	L-3	Single	No	184,794#	26 pallets-100# dr., 19 pallets-121# dr., 185 pallets-140# dr.	Good	Good
5	2327	L-3	Single	No	217,560#	259 pallets-140# dr.	Good	Good
5	2326	L-3	Single	No	203,280#	242 pallets-140# dr.	Good	Good
5	2404	L-2	Single	No	124,320#	148 pallets-140# dr.	Good	Good
5	2415	L-2	Single	No	122,960#	44 S/S, 39 pallets-60# bx.	Good	Good

This completes and accounts for the ninety (90) magazines Priority 1-5, identified containing materials for disposal as outlined in the scope of work. Again, ESI Disposal Prioritization Plan will be continuously updated to reflect better and future data and information on magazine material conditions as it becomes available throughout the project and update LMD accordingly.



Magazine Area L-1

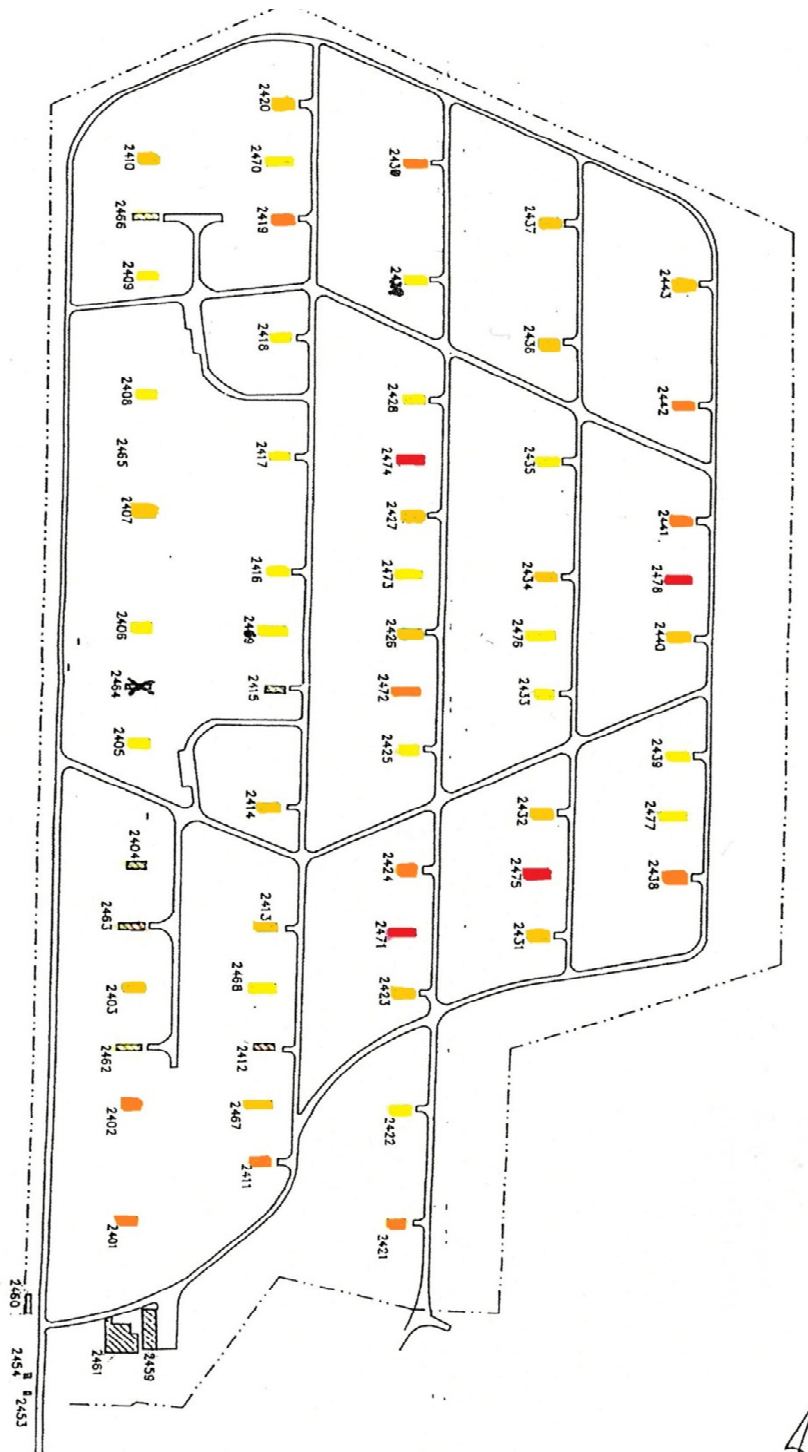


PROPELLANT

AREA L-4 SITE PLAN

ADD TITLES
371-439

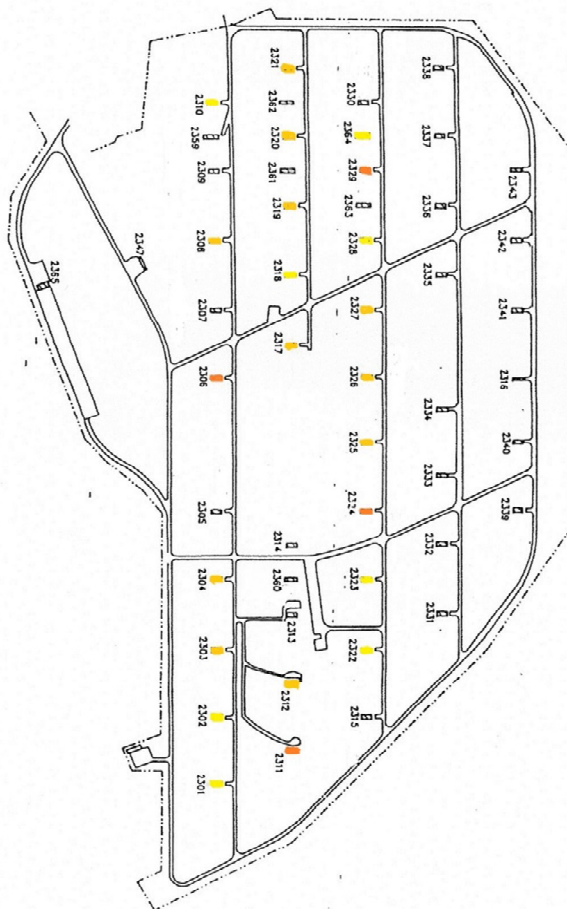
Magazine Area L-4



AREA L-2 SITE PLAN

JOB NUMBER
371-639

Magazine Area L-2



4
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AREA L-3 SITE PLAN

CS NUMBER
371-633

Magazine Area L-3

Magazine Site Security

All magazine keys will be in the sole possession of ESI's Material Removal and Transportation Supervisor (Magazine Site Supervisor). The designated magazines for that day's work will be opened by the Magazine Site Supervisor. At the conclusion of all work activity in the magazines, the keys will be secured overnight in the range control building near the disposal site. During removal operations the roadway will be blocked and signage posted signifying a restricted area on either side of the magazine being worked. At no time will magazines be left unattended while unlocked.

Transportation Approach

ESI's approach to transporting the materials from the magazines was designed around the most efficient equipment available using only DOT compliant and properly licensed/ endorsed drivers. All transportation related operations will be in accordance with 49 CFR regarding the transportation of hazardous material. Understanding that multiple magazines will be unloaded daily supplying material to the disposal site; it was imperative that flexibility meet efficiency. Three (3) curtain-side enclosed trailers will be utilized to transport material. These curtain-side trailers provide a secure all-weather means to transport the various forms of packaging associated with the materials. Empty trailers will be staged at each magazine while the Ottawa terminal tractor transports



full trailers to the disposal site. Again, this tractor is unique in that it can quickly couple and uncouple from a trailer in minutes allowing us the flexibility needed for this project. Throughout the day the Ottawa tractor will be dispatched as needed to pick-up and deliver full and empty curtain-side trailers. Trailers coming from the magazine Area-In route to the disposal site will be manifested documenting the magazine number, type of package and quantity. This document will be retained as a record of the material removed from each individual magazine. This information is for accountability to document how much material was actually removed

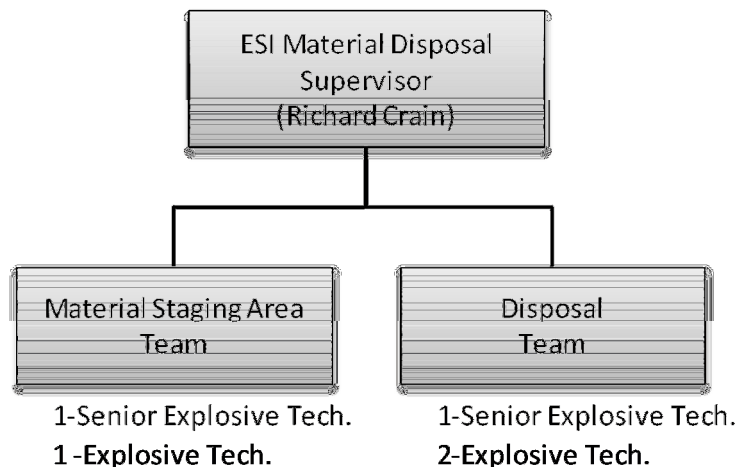


from each magazine throughout the course of the disposal activity. It is not intended for verification of invoicing. Net explosive weight used for invoicing purposes will be determined through the disposal site using a certified scale.

A designated and pre-determined route will be strictly adhered to from each magazine area to the disposal site. This route will be reviewed and agreed upon with LMD prior to beginning the removal and disposal process.

Disposal Site Team

The disposal site will consist of two separate teams working simultaneously **24 hours/day seven (7) days per week**. One team, referred to as the material staging area team will prepare the materials for disposal. The other team, referred to as the disposal team will be responsible for loading and operating the disposal unit being either the contained burn chamber or kiln. All of these personnel will report to the material disposal supervisor who is ultimately responsible for all activity at the disposal site.



Disposal Site Team

Material Staging Area

ESI will erect a covered material staging area on the northern most portion of Area-I with an all-weather working surface. This will greatly enhance the safety and efficiency of the disposal process. ESI will be able to safely segregate the materials from packaging and prepare the propellant material for disposal. We will be able to limit excessing waste handling and determine net explosive weights as required for invoicing.

This all-weather staging area also allows us to use the existing roads within the fenced area of Area-I. In short, once the material is segregated and weighed it will be sent for disposal in pre-weighed and measured bins for direct introduction to the disposal unit. The benefits of using this material staging area are:

- Centralized packaging material removal under covered area
- Flexible to accommodate the variety of package configurations (Super-sack, Drum, Box)
- Allows for extremely accurate calculation of net explosive weight through the certified platform scale as described below
- Allows for waste and recycle materials to be process during inclement weather condition
- Serving as central point for recycle/reuse material minimizing handling
- Larger volumes of material can be safely handled by equipment rather than personnel.

We will erect a temporary all-weather sixty (60) by one hundred (100) foot structure to be removed at the conclusion of the project. This covered structure has fourteen (14) foot vertical sides and a peak height of twenty (20) feet to accommodate the material handling equipment such as forklifts, roll-off dumpsters, reuse-recycle equipment, and certified platform scales.



Example of Temporary Industrial Structure

The material disposal supervisor will oversee all tasks associated with the disposal site to include the material staging area and the disposal unit. In the material staging area the team lead by the Senior Explosive Technician will follow the following sequence of events in preparing the material for disposal:

1. Explosive technicians will inspect the material (M-6 & CBI) once the curtain-side trailer is staged.
2. The explosive technician will direct the forklift operator to remove the palletized materials from the trailer and transport them under the covered material staging structure.
3. Once under the covered structure, the material staging team will remove the packaging from the cardboard boxes, drums and super-sacks. The receiving hopper is designed to accept material at three separate un-packing stations, super-sacks, drums and boxes.
4. The forklifts will place pallets of material by category onto the correct un-packing station and remove the packaging to the recycling/waste area.

Super-sack station:

- a) A forklift will place a palletized super-sack near the designated receiving hopper for the banding and top tray to be removed and the super-sack to be inspected.
- b) Explosive technicians will connect the choker straps on the forklift to the super-sack and position over the receiving hopper to allow access to the funnel sewn into the super-sack. The super-sack funnel is designed to restrict the flow and prevent the uncontrolled release of material.
- c) Explosive technicians will complete the emptying of the super-sack into the receiving hopper.
- d) Once empty, explosive technicians will remove the super-sack from the choker strap on the forklift and invert the sack inside out to verify that it is completely empty. Additional visual inspection will be conducted to comply with DOD regulations ensuring that a 200% inspection is completed on each super-sack.
- e) Each super-sack will be removed and stored in a roll-off container awaiting profiling and off-site disposal.
- f) Explosive technicians will remove the remaining exterior packaging and pallet to the appropriate recycle/reuse container.

Box Station:

A critical component for the box station is the PalletPal 360™. It is a spring actuated level loader which makes unloading pallets of boxes faster, safer and easier. It uses a system of springs and shock absorbers to lower and raise loads as boxes are removed from pallets. A turntable allows nearside unloading of pallet loads up to 4,500 lbs.



- a) All pallets containing boxes are designed to be placed on the spring actuated level loaders maintaining a working height of approximately forty-two (42) inches, specifically designed to minimize worker fatigue and prevent injury.
- b) Two box stations will be positioned on either side of the receiving hopper.
- c) A forklift will place a full pallet of thirty-six (36) boxes onto the level loaders which are staffed by two explosive technicians. This level loader will automatically adjust to keep the boxes at the most efficient working height.
- d) The boxes will be separated and the material will be placed into the receiving hopper.
- e) Anti-static bags from each box will be inverted to insure complete removal of material and undergo a 200% DOD compliant inspection before being removed for storage prior to profiling and off-site disposal.
- f) Pallets and cardboard will be removed to a designated area destined for off-site reuse/recycle.

Cardboard Drum Station:

- a) One DOD compliant forklift will be equipped with a special 360 degree rotating fork attachment with hydraulic top arm fitted with fiberglass reinforced plastic, (FRP) grating.
- b) Explosive technician will un-package the upper pallet, remove vertical banding straps, remove the cardboard drum lid, placing the anti-static bag around the top of each cardboard drum.
- c) Using the specially designed forklift stated above the operator will lift and secure the pallet of cardboard drums with the hydraulic top arm.
- d) The forklift operator will position the secured pallet of cardboard drums over the receiving hopper and initiate the 360° rotation function of the forklift. The material will be safely placed into the receiving hopper more efficiently by using this specially

engineered piece of equipment preventing personnel from having to manually handle the cardboard drums.

- e) The forklift operator will return the pallet of emptied cardboard drums to their original up-right position and remove the anti-static bag from each cardboard drum ensuring all material is placed into the receiving hopper. All anti-static bags will be fully inverted and inspected according to DOD regulations consistent with 200% inspection prior to removal for profiling and off-site disposal.
- f) Pallets and cardboard will be removed to a designated area destined for off-site reuse/recycle.

Receiving Hoppers:

Individual receiving hoppers will be placed in each station. Each hopper will be six (6) foot wide by six (6) long by two (2) foot deep all aluminum container. All components will be bonded and grounded in accordance with DOD standards. These receiving hoppers will have a vertical wood lined end door that can be adjusted to regulate volume as needed to maintain efficiency.

These receiving hoppers will be the transition point for the net material to fill the transfer bins which will be weighed on a certified platform scale prior to disposal.

Transfer Bin:

Our non-sparking, DOD compliant transfer bins which are center-flow containers are the most efficient, versatile containers available to transport and dispense granular/pelletized materials. The smooth, funnel-shaped interior has a 35° angle for efficient flow of the M-6 & CBI contents into the disposal unit. They are designed to completely empty all contents. Our approach is to have twelve (12) transfer bins to maintain a continuous flow of material for disposal.



Transfer Bin

Features and Benefits:

- Side access door allows one person to control the flow and safely remove all or part of the contents
- Tight-fitting lid provides extra protection against contaminants
- Strong, reinforcing crossbars evenly distribute load
- Latches lock ring securely to the base
- Solid oak base rails provide added traction for forklift tines
- Structural foam molded HDPE construction resists impact
- Will not rust, peel or splinter
- Use with temperatures of -20° to 120° F

Certified Floor Scales with Printable weigh ticket:

Two (2) floor scales in accordance with - National Type Evaluation Program (NTEP) approved and certified for verification of quantities [reference National Institute of Standards and Technology (NIST), Handbook 44 Specifications and Tolerances and Handbook 130 – Uniform Weights and Measures], will be used to obtain net explosive weights for invoicing.

These certified low profile floor scales measures six (6) foot by six (6) foot and have the capacity to measure up to 10,000 lbs. The scales will generate both a printed weight ticket with digital

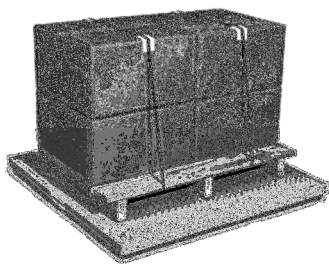
back-up. A close circuit camera will record these two (2) scales for further verification of material weighing.

Net Explosive Material Weight Approach

ESI will report the net explosive weights disposed on a daily basis to the Military Department Project Coordinator. Net weights of material disposed (without packaging and pallets) will be determined using the following process.

At the Material Staging Area-Inside the Disposal Site at Area-I, material either M-6 propellant or Clean Burning Igniter (CBI) will be carefully transferred from the storage container (super sack, box or drum) into a receiving hopper. This receiving hopper will be used to transfer the target amount of material into one (1) of twelve (12) transfer bins. The empty pallets and packaging are inspected and stored in designated areas and/or containers pending final disposition.

The transfer bins are placed one at a time onto a certified floor scale large enough to hold the bin where their weight is tarred using the scale controls. The resulting weight (tare weight) prior to loading material will be zero (0) lbs. The final weight on the certified low profile floor scale will represent the weight of the material (net weight). The net weight of the material is electronically recorded; a weight ticket is produced showing the weight, date and other information. This information is incorporated into a report that is presented to the Military Department Project Coordinator. The data will also be compiled into monthly reports and into the final report once all activities have been completed. Additionally, a closed circuit video camera system will record the weighing process for additional verification.



Certified Scale

The transfer, collection and loading process is continued through the day to sustain feed to the disposal unit. Full transfer bins will be moved with a forklift from the material staging area

down to the disposal unit. Empty bins will be returned from the disposal unit back to the material staging area for the process to be repeated.

House Keeping

ESI will conduct site clean-up actions on a daily basis to reduce our environmental footprint at the Disposal Site. As a result of this project, recycle/reusable waste will be accumulated each day during normal work operations. This material includes cardboard boxes, drums, super sacks, shrink wrap, metal banding straps and pallets. ESI's Material Staging Area-Is specifically engineered to account for these waste items. As waste is generated, it will be removed to the correct designated location where it will be segregated and placed in roll-off bins for offsite disposal or recycle/reuse. This process will provide for a cleaner working environment at the site, as well as, increase our overall efficiency on a daily basis.

Contained Burn Chamber Procedure

1. LIVE BURN TRAY PLACEMENT

- a. Forklift will position burn tray on support shelf (ensuring that the tray is never raised above safe operating height) of the contained burn chamber.
- b. Once the burn tray is placed onto the shelf technicians will place the thermal initiator onto the tray
- c. The technician will connect the thermal initiator wires to termination points on the contained burn chamber; (the ignition circuit remains both unarmed and open at this stage with a redundant series of interlocks) ignition circuit interlocks include:
 - autoclave door interlock: the ignition circuit cannot be armed or physically completed until the autoclave door is in the closed and locked position
 - PLC interlocks: the ignition circuit can only be armed at the control room, once the PLC confirms that all critical operating conditions are satisfied (autoclave door position, autoclave door locked, PAS system parameters within limits, chamber temperature and pressure within limits)

- Key switch: the circuit can only be armed by the operator key switch after the control room operator verifies that all personnel are clear and when the above conditions are satisfied
 - Timer interlock: a 30 second timer is activated when the ignition circuit is armed, which resets and disarms the circuit, if the control room operator does not initiate the firing current within this time period
- d. E-stop interlock: An E-stop interlock disables the ignition circuit if any in a series of E-stops is activated at any time throughout this process
- e. Technicians will report to the control room
2. REMOTE LOADING SEQUENCE
- a. Control room technician will verify that the contained burn chamber Area-Is clear through visual observation as well as through video monitor.
- b. Control room technician will start the loading sequence remotely with an electronic PLC command, the following sequence will occur
- The loading shelf will move forward on the trolley system to place the tray inside the thermal treatment chamber (TTC)
 - The autoclave door will lock in place, which seals the chamber and completes the ignition circuit
 - The Process Logic Controller (PLC) will verify that the chamber is sealed
3. ARMING SEQUENCE
- a. Control room technician will check and arm the ignition circuit
- Continuity of the electric ignition system is verified remotely by the operator via the PLC
 - The PLC will automatically verify that all systems are functioning correctly
 - The operator will arm the ignition circuit by key switch
 - A warning horn/light will activate automatically
 - The ignition circuit arming is on a safety timer
4. IGNITION/BURN SEQUENCE
- a. Control room technician will remotely ignite the batch via command to the firing control panel
- Burning of propellant will occur inside the thermal treatment chamber
 1. PLC monitors burn conditions and alerts control room technician to any anomalies
 2. PLC indicates when the burn cycle is complete

3. PLC verifies that pollution abatement system is functioning properly and TTC gases are ready to be treated through the pollution abatement system

5. TTC VENT and GAS SCRUBBING SEQUENCE

- a. Control room technician begins vent cycle via command on the PLC control panel
- b. TTC vent valve opens and meters gas flow to the pollution abatement system (PAS)
 - Gases are drawn through the pollution abatement system and out the stack by the induced draft fan (this maintains a negative pressure throughout the PAS, downstream of the TTC, which prevents leakage of untreated emissions)
 - Operating conditions throughout the pollution control system are continuously monitored by the PLC (if a fault occurs the vent valve closes to stop release of any emissions)
 - When the pressure in the TTC is below atmospheric the PLC notifies the control room technician that the venting cycle is complete and the loading door can be opened

6. REMOTE UNLOADING CYCLE

- a. Control room technician unlocks and opens the loading door via command to the PLC control panel
 - Autoclave Door Unlocks (an interlock prevents this from happening if there is any positive pressure in the chamber)
 - Loading shelf retracts from chamber which allows the technician to confirm empty burn tray condition via CCTV
- b. Control room technician gives all clear for personnel to approach the loading system.

7. POST BURN INSPECTION AND TRAY REMOVAL

- a. Technicians inspect and unload the empty burn tray via forklift and place the tray at the cooling area
- b. Technicians verify that the loading shelf temperature is below safe limit, 260°F, with IR gun and double check with portable water spray

Misfire Handling Procedure

If a misfire occurs the ignition circuit is disarmed. The status of the ignition circuit can be checked remotely from the control room to determine if the ignition circuit is closed or open, the resistance of the ignition circuit, and the duration, voltage and current which the thermal initiator experienced. This will confirm if there is a short or fault in the electrical circuit. If it is determined that the thermal initiator requires inspection or replacement the control room operator can open the autoclave door and remove the burn pan remotely to allow remote visual inspection by camera. Operators will only be allowed to approach the burn tray to replace the thermal initiator, once remote visual inspection is completed to verify conditions are safe and a minimum waiting period is observed.

ESI Explosive Technicians will implement misfire procedures before approaching any burn tray. Only two trained and qualified Explosive Technicians (ET) shall approach the burn tray area.

The ET's will carefully identify any faulty electrical initiator. This ignition circuit shall be checked for continuity and a new thermal initiator will be re-primed following the aforementioned priming/firing sequence.

Confined Space Entry

Confined space entry is not required during normal operations. If it is required for personnel to enter the thermal treatment chamber for inspections or maintenance, a formal confined space entry procedure will be strictly followed. This will include door watch and air monitoring to allow entry by the operator in to the chamber through the 6 foot diameter loading doorway.

Lock out/ Tag Out

The system is equipped with disconnect switches for all powered equipment to allow operators to perform lock out/tag out before performing maintenance on any powered equipment. This also includes the ability to block and lock out/tag out the fuel train to the afterburner.

Ash Handling

The design of the contained burn chamber is engineered to produce minimal ash (<0.2% by volume) which will be collected for profiling and off-site disposal. At the completion of a burn cycle the tray will be removed to a covered "cooling" area where the ash will be collected. The ash will be placed into a suitable container, sampled and profiled for disposal. Our experience is that the ash will be classified as Non-Hazardous and suitable for landfill. Some ash will collect inside the thermal treatment chamber as well. This ash will be removed periodically by

an industrial vacuum equipped with an extension wand to allow cleanout to be performed without personnel entry. This ash material will also be characterized prior to off-site disposal, based on our experience this ash will be classified as Non-Hazardous and suitable for landfill. It is expected that collection of ash from the thermal treatment chamber will only be required once at the completion of the project.

All ash collected in the PAS is automatically collected in to sealed drum containers for subsequent characterization and disposal. Operators will monitor the ash level in these drums and when a drum is more than 75% full it will be sealed and replaced by an empty drum. Based on experience the drums will likely only require replacement every 1-3 months. Material from the full drum will be characterized, again this will be non-hazardous based on experience, and the entire sealed drum is then shipped for offsite landfill disposal.

Kiln Procedures

1. LOAD NEAT PROPELLANT INTO FEED HOPPER

- a. Kiln feed is stopped during hopper loading
- b. Technician verifies the permanent feed hopper water level is within the operating limits.
- c. Technician positions bottom dumping hopper over the feed hopper using a forklift
- d. Technician introduces neat propellant into the feed hopper
- e. Technician closes bottom dumping hopper and reports to the control room
(Personnel do not need to be present at the feed area during operations)

2. PROCESS NEAT PROPELLANT IN KILN

- a. The kiln operates automatically with the PLC adjusting the semi-continuous propellant feed and airflow to the kiln to maintain the proper kiln operating parameters
 - i. Control room technician sets the kiln temperature, propellant feed rate and kiln draft pressure (Note: On a cold start, the control room technician will start the kiln and allow it to reach operating temperature before the interlock is satisfied to begin feeding propellant.)
 1. PLC adjusts the speed of the feed conveyor to maintain the propellant feed rate.

2. The conveyor removes propellant from the bottom of the feed hopper where it is submerged in water to eliminate propagation from the kiln.
 3. The propellant is transported automatically by the conveyor through a barricade wall where it is dropped into the kiln. Multiple redundant water traps/curtains are employed to prevent propagation from kiln to material in feed conveyor
 4. The PLC automatically stops the feed conveyor if there is an upset condition in the feed system, kiln or PAS
- ii. Control room Technician monitors the propellant feed rate, kiln temperature and draft.
 - iii. Control room Technician addresses any warnings or alarms generated by the PLC controls.
 1. PLC generates alarms if critical operating parameters approach normal limits of operation.
 2. PLC automatically shuts down the equipment if the operating parameter exceeds their normal limits to protect personnel and equipment.

Ash Handling

The design of the kiln is engineered to produce minimal ash (<0.2% by volume) which will be collected for profiling and off-site disposal. Ash which settles in the kiln will be collected periodically by personnel with an industrial vacuum. Periodic collection of ash from the kiln is only anticipated to be required 1-2 times during the duration of the project. The kiln is designed with a large motorized door to allow for convenient operator access. The door is equipped with interlocks which prevents opening of the door when the kiln is in operation, or operation of the kiln if the door is open. The kiln is not a confined space when this door is opened. All ash collected in the PAS is automatically collected in to sealed drum containers for subsequent characterization and disposal. Operators will monitor the ash level in these drums and when a drum is more than 75% full it will be sealed and replaced by an empty drum. Based on experience the drums will likely only require replacement every 1-3 months. Material from the full drum will be characterized, again this will be non-hazardous based on experience, and the entire sealed drum is then shipped for offsite landfill disposal.

Lock out/ Tag Out

The system is equipped with disconnect switches for all powered equipment to allow operators to perform lock out/tag out before performing maintenance on any powered equipment. This also includes the ability to block and lock out/tag out the fuel train to the afterburner.

Emergency Response and Evacuation Plan

ESI will prepare all employees for handling emergencies and for safe site evacuation if needed. Based on the nature of work, this is a crucial component for all ESI employees. While the ESI goal for the duration of this project is “Zero” accidents and/or emergencies, we cannot control every condition and must be prepared to respond and evacuate the work sites if emergency conditions arise.

During Phase 1 (Mobilization and Site Preparation) ESI will:

- Conduct training for emergency response and evacuation to include the Camp Minden emergency evacuation procedures, as well as the lightning evacuation requirements of DOD 4145.26-M, C3.7.
- Conduct and document emergency response and evacuation procedures for its employees involved with this project during the training.
- Develop an SOP which covers the lightning protection process, safe distances, and time requirements for safe shutdown of Magazine, Transportation, Material Staging, and Disposal Unit operations pursuant to IAW DOD 4145.26-M, C3.7.2..
- Conduct and assess an ESI site wide emergency response drill and adjust our SOP accordingly.

Our plan for this project includes emergency response and site evacuation that are simple and easy to understand for all ESI employees. The Range Control Facility will be our central key facility for all ESI functions to start and end each day. It will also be our central personnel evacuation control point for emergencies and site evacuation.

The ESI Health and Safety Manager, as well as the other ESI Managers, will advise the ESI Project Manager on emergencies and site evacuation, however the ESI Project Manager is the single authority to call for a site wide evacuation and all ESI personnel will report to the Range

Control Facility for accountability and further instructions. This allows us to know that all ESI personnel are accounted for and insures any further instructions on evacuation come directly from the ESI Project Manager at the time of the emergency.

Our primary communication with each Magazine Team, Truck Drivers, and the Disposal Site Area personnel will be two way radios. The radio communications will be tested each morning at each site. If site evacuation is required, this will be directed by the ESI Project Manager via the two way radios. At the time of an emergency event, all ESI personnel will be directed to evacuate their work sites (Magazine Area, Trucks & Disposal Site) and proceed immediately to the Range Control Facility. The only exception is loaded trucks in route to the Disposal Site will continue to the Material Staging Area. The Driver will immediately park and move to the Range Control Facility.

In the event of lost communication between sites at the time of an evacuation order, we will send a messenger to direct personnel evacuation to the Range Control Facility.

During our daily Job Safety meetings, employees will be notified of pending weather and advised of the daily operations according to the local weather forecast. In addition, the ESI Health and Safety Manager will have the responsibility of monitoring the weather station at Range Control Facility; as well as, local weather forecasts, monitoring lightning strike software, and using a hand held lightning warning instrument to collect data for advising the ESI Project Manager. The Disposal Site, whenever possible, will be alerted 60 minutes prior to adverse weather approaching. The Disposal Site will then stop loading and will attempt to follow procedures and safely initiate any material already loaded in the disposal unit.

All ESI personnel will receive training on first aid and initial fire extinguisher use to handle initial response to small fires such as vegetation, forklift, tractor or combustible material not involving explosives material. If explosives material is involved in a fire, employees will be trained to evacuate to a safe distance and communicate the conditions via two way radio. NEVER FIGHT FIRES INVOLVING EXPLOSIVES.

In the event of an accident, ESI personnel will render aid and then call via two way radio to the Range Control Facility for emergency response. The ESI Health and Safety Manager will be responsible for establishing and updating the emergency call list in the HASP and Range Control facility. ESI will have a designated POC in the Range Control Facility operating the two way radio as central communications and will be assigned to contact emergency responders. The ESI Health and Safety Manager and ESI Project Manager will serve as a back-up to call for emergency responders.

If sufficient time for a safe evacuation to the Range Control Facility does not exist, then employees will be trained to radio the Range Control Facility of their location. Employees should shelter in a vehicle in the event of an electrical storm or move to a ditch or depression away from trees if a tornado or high winds present a danger.

Inclement Weather

During the pre-work safety meeting weather conditions will be reviewed. Each critical magazine team will be equipped with a lightning strike detector meter capable of detecting lightning within 40 miles. Additional details are found in our Health and Safety Plan, (HASP). All work will cease during inclement weather where the potential for lightning strike is prevalent.

Road Closures

One of the advantages of Area-I versus E-line is that there is no required road closures needed which would impact other contractor activity or base operations. During Phase I (Mobilization & Site Preparation), ESI will erect a steel gate on the road to Area-I near the intersection with Java road. This gate will control access to Disposal Site inside Area-I and will be positioned near the Range Control building. All traffic entering the “Disposal Site” at Area-I will be required to come through this gate and report in to “Range Control Facility” located just inside the gate.

This greatly enhances the security of the disposal operation and does not impact normal operations at Camp Minden outside of Area-I. It minimizes the impact of this project to other contractors and the LMD on Camp Minden. Also, it eliminates the unnecessary closure and opening of roadways through the day and provided 100% security and limited site access required during disposal operations.

ESI Communication Plan

Two-way radio will be the primary means of communication between ESI work sites and personnel. The thermal initiators are electrically initiated so the following measures will be taken when the thermal initiators are being transported or handled by ESI personnel:

- a. Reference DOD 4145.26-M, C15.8.2.2.5: Electric blasting or demolition operations and unshielded electric blasting caps shall be separated from radio frequency (RF) energy transmitters by safe distances.



- b. Reference DOD 4145.26-M, C15.8.2.2.6: When transported by vehicles with two-way radios, and when in areas presumed to have extraneous electromagnetic pulse, blasting caps shall be in closed metal boxes.
- c. Reference DA Pam 385-64, Para 17-15.i. Cellular telephones should not be present within ten feet of unpackaged, electrically-primed ammunition.
- d. Reference DA Pam 385-64, Para 17-15.g.
 - i. A minimum safe distance of 1.5 meters (5 feet) is allowed for citizens band radios (walkie-talkies) (26.96 to 27.23 MHz) which have less than 5 watts in power.
 - ii. A minimum safe distance of 21 meters (69 feet) is allowed for 2-way mobile units in VHF (150.8 to 161.6 MHz) and 13 meters (43 feet) for 2-way mobile and fixed station units in UHF (450 to 460 MHz), which have less than 180 watts in power.
 - iii. A minimum safe distance of 88 meters (290 feet) is allowed for major VHF 2-way mobile and fixed station units in 35 to 44 MHz range which have less than 500 watts in power.
 - iv. A minimum safe distance of 35 meters (115 feet) is allowed for VHF 2-way fixed units in 150.8 to 161.6 MHz range which have less than 600 watts in power.

Phase 3 - Site Restoration and Demobilization

Environmental and Site Recovery and Restoration

Once contracted, ESI will submit a Post-Removal Site Control and Implementation Plan specifying the objectives, implementation, monitoring, inspection, reporting, remediation, and restoration. This plan will be subject to the Military Department, and USEPA approval. The plan will follow all key environmental and compliance considerations including those associated with the Louisiana Department of Environmental Quality (LDEQ) Risk Evaluation-Corrective Action Program (RECAP). ESI will implement this plan and conduct Post-Removal Site Control activities until such time as the Military Department and the USEPA determines that no further Post-Removal Site Control is necessary. ESI will provide the Military Department and the USEPA with documentation of all Post-Removal Site Control measures.

Once all material identified by the Military Department, State of Louisiana (Military Department) has been removed and properly disposed through on-site treatment and offsite disposal, ESI will begin the project closeout process. This will include:

- Removal of all equipment and material mobilized, installed and utilized to complete the project;
- Restoration of the areas in accordance with the requirements of the Military Department RFP dated December 8, 2014; and,
- Submittal of a Project Report.

The closeout process will begin with the final removal of any remaining packaging (super sacks, cardboard boxes, metal drums, fiber drums, pallets, shrink wrap, and any other associated materials) derived from the material removal process, as well as the removal of any remaining ash derived from the burning of the material. Removal of this material and waste will follow the procedures as ESI established, initiated and followed, as well as approved by the Military Department and the USEPA at the beginning of the project. In removing this material and waste, ESI will perform hazardous waste characterization and disposal of all waste in accordance with State and Federal solid and hazardous waste regulations. All off-site transportation of hazardous waste will be performed in conformity with the USEPA Resource Conservation and Recovery Act (RCRA) and U.S. Department of Transportation (USDOT) requirements. Items no longer required including: heavy equipment, storage containers, receiving hoppers, transfer bins and burn trays will be cleaned of any trace of material or waste and inspected before removal from the site and facility.

Areas around the storage magazines will be inspected for damage (rutting, etc.) and will be compared to photos and notes made prior to any removal efforts began. Any inconsistencies, deficiencies or issues not present before the removal process began will be corrected in an effort to return the magazine areas to a level consistent with its original condition. These final inspections will occur during the life of the project as magazines have been emptied, cleaned, inspected, returned to the Military Department and accepted by the Military Department as clean.

ESI will restore the Disposal Site to a level consistent with its original condition unless otherwise directed by the Military Department. This will start with the removal of the disposal unit, concrete and crushed rock area pad, any residues from the M6 and CBI munitions, other solid waste generated during the project (super sacks, cardboard boxes, metal drums, fiber drums, pallets, shrink wrap, ash and other associated materials), equipment, and any other ignitable

materials. Once this step is complete post-removal sampling will be completed per the site Sampling and Analysis Plan (SAP), following all quality control procedures set forth in the site Quality Assurance Project Plan (QAPP), as well as the Post-Removal Site Control and Implementation Plan. All of these plans will be submitted for review and approval as required after contract award.

Once it has been determined that no release has occurred or that any release has been mitigated through sampling and analysis, the areas of concern within the Disposal Site and the Material Staging Area will be returned to a level consistent with their original condition. Final removal will be approved by the Military Department and USEPA.

Final Report and Project Closeout

Once all material identified by the Military Department, State of Louisiana (Military Department) has been removed and properly disposed through on-site treatment and offsite disposal, ESI will begin the project closeout process. This will include:

- Removal of all equipment and material mobilized, installed and utilized to complete the project;
- Restoration of the areas in accordance with the requirements of the Military Department RFP dated December 8, 2014; and,
- Submittal of a Project Report.

The planned process for the removal of all equipment and material mobilized, installed and utilized to complete this project; as well as, the restoration of all disturbed areas will be completed in accordance to the requirements of the Military Department.

ESI will provide a document as a final report within fifteen (15) days after the completion of all work required by the Military Department and in accordance with the requirements set forth by the December 8, 2014 RFP. This Final Report will be provided to the Military Department for submittal to the USEPA for USEPA review and approval, and will summarize the removal operation and the actions taken to comply with the implementation of the contract. The final report will conform to the OSC Report requirements of the National Contingency Plan (Title 40 Protection of the Environment, Part 300 National Oil and Hazardous Substances Pollution Contingency Plan, §300.165 OSC reports).

The plan will detail the actions taken by ESI to remove and dispose of all the material identified by the Military Department. The report will include quantities and types of materials removed off-site as well as disposed of on-site through treatment, details of removal and disposal options considered for those materials, a listing of the ultimate disposition and destination of those materials, analytical results of all sampling and analyses performed, certificates of disposal listing quantity and type of material disposed, and appendices containing all relevant documentation generated during the removal action (manifests, invoices, bills of lading, contracts, permits, QAQC reporting, inspection reports, Health & Safety reports, etc...).

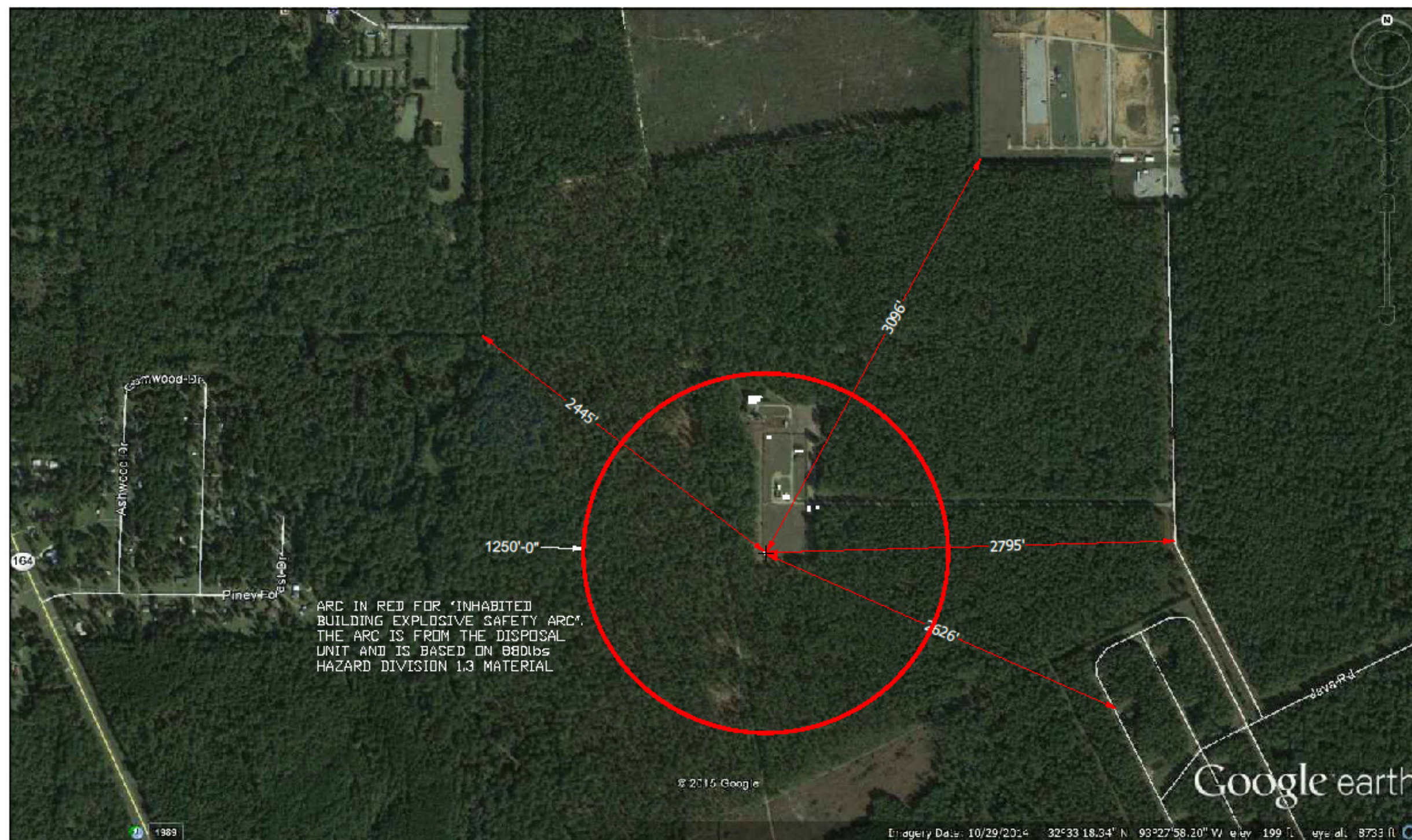
MAPS



MAP 1
Area-I Disposal Site
Intraline Distances



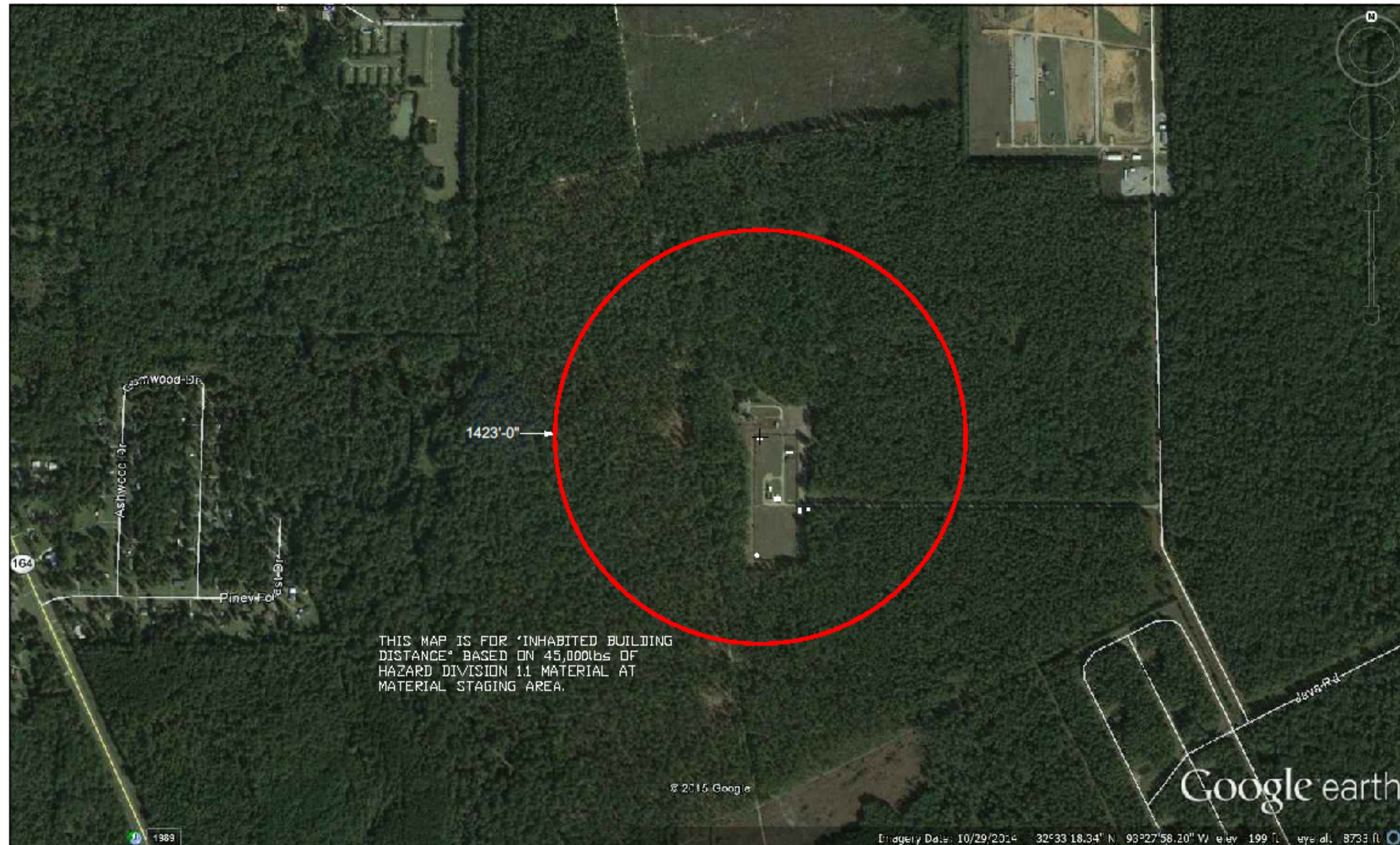




MAP 2
1250lb Inhabited Building
Safety Arc based on 880 lbs.
of 1.3 Material







MAP 3
1423' Safety Arc
Inhabited Building based on
45,000 lbs. of 1.1 Material



