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Subcontractors	Program Requirements Document	For Additional Info: http://EDMS	Effective Date: 05/30/19
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Manual: Subcontractor Requirements

Change Number: 362986

*The current revision can be verified on EDMS.

1. PURPOSE

This document provides requirements to ensure personnel safety during the transportation, storage, and use of *explosives* (see def.). This document implements requirements from codes and standards along with *contractor* (see def.) requirements. Any applicable regulatory or contractor requirements must be followed, with the most stringent requirement being met.

2. APPLICABILITY

This document applies to all subcontractors who transport, store, or use explosives at the Idaho National Laboratory (INL), as specified in their contract with contractor. Stricter requirements may be imposed by subcontractors upon their employees or subtier contractors. The requirements of this document must be followed by subcontractors; however, the means of implementation may vary as determined by the subcontractor.

The ICP contractor performs explosive work activities only through subcontracting the work scope.

DOE STD-1212-2012 “Explosive Safety” list the applicable requirements for use of explosives at DOE sites. OSHA 29 CFR 1910.109 “Explosives and Blasting Agents” applies to use of explosives in general industry, and OSHA 29 CFR 1926 Subpart U “Blasting and Use of Explosives” applies to the use of explosives in construction.

3. REQUIREMENTS

3.1 Training

- 3.1.1 All employees who handle, use, transport, or store explosive materials shall receive the following training:
- A. Contractor employees whose jobs require the support of explosives work activities must complete OICP1042, “Safely Storing and Handling Explosives,” or equivalent
 - B. Employees who transport explosives shall be trained and qualified as required by the Department of Transportation (DOT)
 - C. Employees shall be qualified in accordance with 29 CFR 1910.109, “Explosives and Blasting Agents,” 29 CFR 1926, Subpart U, “Blasting and the Use of Explosives,” and the Department of Energy (DOE) Explosives Safety Standard, DOE STD-1212-2012 Chapter V “Training”

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- D. Employees performing explosive ordnance disposal (EOD) activities will have completed documented training for *EOD qualified personnel* (see def.).

3.2 Administrative Activities

- 3.2.1 Transportation, storage, use, and disposal of explosives shall be performed in compliance with applicable sections of the DOE Explosive Safety Standard DOE STD-1212-2012 and applicable sections of 27 CFR 55 ATF, Commerce in Explosives.
- 3.2.2 Before any explosive operation is conducted, plans and procedures shall be developed and approved, and shall be used for the procurement, handling, storage, inspection, inventory, use, security, disposal of explosive materials, and disposal of undetonated explosives. Explosive procedures for operations shall be prepared and controlled per DOE STD-1212-2012 Chapter VII “Operating Procedures”
- 3.2.2.1 Any necessary exemptions or waivers for explosive safety requirements must be processed according to DOE STD-1212-2012 Chapter I section 3.0 Exemptions or 4.0 Waivers.
- 3.2.3 Plans and procedures shall address the required editions of the Occupational Safety and Health Administration (OSHA) standards, DOE orders and manuals, applicable codes and regulations, and National Fire Protection Association (NFPA) codes, as listed in 10 CFR 851, “Worker Safety and Health Program,” and the contractor’s contract with the Department of Energy Idaho Operations Office (DOE-ID)
- 3.2.4 Explosive Safety Plans must meet the requirements of DOE STD-1212-2012 Chapter VI “Quantity-Distance and Level of Protection Criteria for Explosives Activities.
- 3.2.5 Explosive-use plans will be reviewed and approved by the contractor’s explosives subject-matter expert or other qualified employee. Explosive-use plans shall address the following items:
- A. A detailed strategy and description for the specific use of the explosives
 - B. An explosives safety analysis (see Appendix A, Explosives Safety Analysis)
 - C. Methods and equipment for transporting explosives and detonators
 - D. Potential hazards and hazard mitigation procedures

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- E. Alternative use and handling procedures or special operating procedures as needed
 - F. The type and location of storage facilities
 - G. The primer assembly procedure and location
 - H. Employee training requirements
 - I. Provisions for protecting people, structures, and property
 - J. Required notifications prior to firing
 - K. Safety signals, post-blast inspection, and misfire procedures
 - L. Provisions for developing and distributing a daily blasting plan covering hole diameter, spacing, loading, and delay patterns
 - M. Provisions for disposal of explosives, blasting agents, and associated materials
 - N. Procedures for removal of leaking, broken or defective explosive packages
 - O. Hazardous materials and explosives procurement records
 - P. Safety data sheets
 - Q. Explosives test data sheets
 - R. Vendor data
 - S. Explosives storage inventories
 - T. Training records
 - U. Shipping papers.
- 3.2.6 Applicable environmental regulations, 40 CFR 264, 265.382, and 270; Resource Conservation and Recovery Act (RCRA), and DOT regulations shall be incorporated into any disposal procedures for unused, misfired, or out-of-date explosive materials.
- 3.2.7 The subcontractor will designate a qualified *explosives-use supervisor* (see def.) who will be responsible for the use, transportation, storage, and disposal of explosive materials.
- 3.2.8 FRM-2740, “Explosives Use Permit,” (see Appendix B, Explosives Use Permit [Example]) shall be prepared by the subcontractor and approved by the contractor for explosives operations at contractor-controlled facilities or areas.

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- 3.2.9 Explosives-use permits shall address the following items:
- A. Applicable federal regulations and contractor policies and procedures
 - B. An explosives safety analysis (see Appendix A) or job-specific procedure
 - C. A copy of the explosives-use plan or equivalent document for firing explosives or explosive devices
 - D. Any waivers or exemptions to explosives safety requirements.
- 3.2.10 Explosives-use permits, and plans shall be submitted to the *contractor's point of contact (POC; see def.)* at least seven calendar days in advance of proposed explosives use.

NOTE: *For complex explosives-use permits, additional time may be needed for an adequate review of the explosives-use plan.*

3.3 Procurement and Delivery of Explosives

- 3.3.1 If subcontractor-purchased explosives are to be delivered to the INL, the subcontractor shall provide contractor with arrival dates and instructions for the disposition of ordered explosives.

NOTE: *The subcontractor or explosive shipper can utilize FRM-2739, "Explosive Shipment Inspection Checklist", see Appendix C, for preparation of delivery and to ensure that the necessary documents are available.*

- 3.3.2 Subcontractors shall contact the contractor's POC 24 hours in advance of the expected delivery time of any DOT-classified explosives or blasting agents. The contractor's POC will notify other on site organizations including Packaging and Transportation Department (P&T), Protective Force, and Warning Communications Center (WCC)
- 3.3.3 The contractor's POC shall ensure that the delivered shipment is inspected by the contractor's P&T personnel trained as hazardous material (HAZMAT) shippers and the subcontractor's explosive custodian, then documented using FRM-2739, "Explosive Shipment Inspection Checklist," see Appendix C, and retained.
- 3.3.4 Explosives test data sheets and material safety data sheets (MSDSs) shall be available for each type of explosive brought to contractor-controlled facilities and areas.

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3.4 Explosives Transportation

3.4.1 Drivers of vehicles transporting any class of explosive will possess a valid commercial driver's license (CDL) with a HAZMAT endorsement and meet all requirements of a DOT HAZMAT employee. This would include training in HM-181 (hazardous material transport training), DOT medical approval, drug screening, and other DOT requirements for a HAZMAT driver.

3.4.1.1 The subcontractor will make available for review the driver qualification files for operators of vehicles transporting any class of explosive.

NOTE: *Drivers maintaining the HazMat driver qualification, QCPT0002, in accordance with company documents MCP-2670, "Motor Carrier Operations" or drivers having equivalent safety by complying with requirements from PLN-320, "Transport Plan for the Movement of Explosive Materials within the Boundaries of the Idaho National Laboratory" meet the requirements for Explosive Transportation.*

3.4.2 Before transporting explosives over public highways within INL boundaries or on INL Site roadways, subcontractors shall contact the contractor's POC and arrange for an escort.

3.4.3 All motor vehicles transporting explosives over public highways within INL boundaries or on INL Site roadways shall meet the following regulations:

- A. OSHA regulations, 29 CFR 1910.109; and 1926 Subpart U
- B. DOT regulations, 49 CFR 171-173, 177 and 390-397
- C. The requirements of the DOE Standard 1212-2012.

3.4.4 Explosives, detonators, electro-explosive devices, and primary explosives shipments will comply with the shipping, placarding, packaging, and segregation requirements of the hazardous materials tables found in 49 CFR.

3.4.5 Incompatible explosives must be shipped separately.

3.4.6 Explosive packages must be labeled with explosive custodian's name, material name and class/division /group.

3.4.7 Vehicles used for the transportation of any class of explosive will be in good condition and meet the requirements stated in 49 CFR and OSHA 1910.109, and requirements of the Idaho DOT for the transportation of explosives. When one or more regulatory requirements conflict, then the most stringent will apply.

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3.4.8 Portable explosive magazines must be labeled as to the contents and hazard class.

3.5 Explosives Security

3.5.1 Subcontractors shall maintain continuous security and control of explosives.

3.5.2 *Explosives custodians* (see def.) shall be assigned for accountability of explosives.

3.5.3 A custody log shall be maintained when ownership of explosives is transferred.

3.6 Explosives Storage

3.6.1 Storage magazines, storage operations, *quantity distances* (see def.), and *intraline distances* (see def.) for storage magazines shall meet the applicable requirements of the DOE STD-1212-2012.

3.6.2 Portable storage magazines shall comply with Bureau of Alcohol, Tobacco, and Firearms (BATF) P5400. 7, “ATF Explosives – Laws and Regulations.”

3.6.3 Explosives shall be stored only in magazines and areas approved by the contractor’s POC. Portable magazines shall be sited per DESR6055.09, Edition 1 “DoD Explosives Safety Standards”

3.6.4 Explosives, time fuses, and detonators shall be stored in accordance with the following requirements:

- A. The DOE STD-1212-2012
- B. 29 CFR 1910.109 and 29 CFR 1926 Subpart U
- C. Recommendations of the explosive’s manufacturer.

3.6.5 Magazines containing detonators shall be separated from magazines containing other explosives or blasting agents by the distances specified in publication Number 2 of the Institute of Makers of Explosives (IME).

3.6.6 Explosive materials and accessories shall be removed from the INL within 30 days of the expiration of the associated explosives-use permit, unless approval for up to an additional 90 days to keep the materials on the site is obtained from the contractor’s POC.

3.6.7 For extended storage, shelf-life criteria for the stored materials shall be reviewed at least annually.

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- 3.6.8 For each type of explosive brought to contractor-controlled facilities and areas, test data sheets and material safety data sheets shall be available for review.
- 3.6.9 Explosives magazines shall have “No Smoking or Open Flame Within 50 feet” signs posted.
- 3.6.10 Explosives magazines shall have fire division classification signs posted in accordance with DESR 6055.09, Edition 1 “DOD Ammunition and Explosives Safety Standards”, visible from the normal approaches to magazine areas.
- 3.6.11 Broken, leaky, or defective packages of explosives shall be disposed of in accordance with approved procedures or methods as soon as possible after detection.
- 3.6.12 Empty boxes and combustible packing materials that contained explosives shall be removed from the INL and shall be disposed of in accordance with 29 CFR 1926.900(l).
- 3.6.13 In the event of a fire in an outside explosive’s magazine, all personnel shall immediately be evacuated and the WCC shall be notified.
- 3.6.13.1 All affected personnel shall be moved to a safe area at least 4,000 feet from the fire, and the fire area shall be guarded against intrusion.
- 3.6.13.2 Subcontractor personnel shall not fight any fire in an explosive’s magazine.
- 3.6.14 Personnel entry, explosives quantity, and material for operations in and around magazines shall be controlled in accordance with 29 CFR 1910.109; 29 CFR 1926, Subpart U; and the DOE STD 1212-2012.
- 3.6.15 Magazines shall be securely locked at all times except for inspection or movement of explosives.
- 3.6.16 Each magazine door or lid shall be equipped with two hardened padlocks fastened into separate hasps unless located in a secured or patrolled area and approved in writing by the contractor’s POC.
- 3.6.17 Only authorized personnel shall be allowed in or near explosives magazines.
- 3.6.18 A buddy system shall be used for entrance into any explosives magazine and storage area.

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- 3.6.19 Operational limits for each magazine shall be posted on or near the magazine.
- 3.6.20 An auditable inventory shall be kept of all explosive materials.
- 3.6.20.1 The inventory shall use units of measure suitable to the type of explosives being stored.
- 3.6.20.2 The inventory shall be kept in the explosives storage magazines in accordance with the requirements of the DOE STD-1212-2012 and Bureau of Alcohol, Tobacco, and Firearms (BATF) P5400.7, “ATF Explosives – Laws and Regulations.”
- 3.6.20.3 Inventory data shall be provided to the contractor’s POC.
- 3.6.20.4 Any discrepancy in explosive materials inventories shall be immediately investigated to determine if any explosive materials are actually missing.
- 3.6.20.5 Any actual loss or theft of explosive materials shall be immediately reported to the contractor’s POC, Protective Force manager, the DOE-ID Safeguards & Security manager, and the WCC.

3.7 Handling and Use of Explosives

- 3.7.1 Operational Safety for use of explosives shall meet the applicable requirements listed in DOE-STD-1212-2012 Chapter II “Operational Safety”
- 3.7.2 Explosive limits, personnel limits and limit control shall meet the requirements of DOE STD-1212-2012 Chapter III “Explosives and Personnel Limits and Control”
- 3.7.3 Explosives operations shall be conducted in accordance with the approved explosives-use plan and permit.
- 3.7.4 Only authorized and qualified persons shall be permitted to handle or use explosives.
- 3.7.5 An approved lightning detection device shall be used at explosive blasting sites to give warning of impending electrical storms.
- 3.7.6 Explosives operations shall be shut down whenever an electrical storm approaches within 5 miles of the explosives area.

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- 3.7.7 When electromagnetic, magnetic, or electrostatic energy threatens an explosives operation, work shall be stopped, and the area shall be evacuated; but if the charges are ready to be fired, approval may be obtained from the explosives-use supervisor for a preemptive shot to eliminate the greater hazard.
- 3.7.8 Explosives operations shall be separated from radio transmitters and electromagnetic power sources by the distances specified in IME pamphlet Number 20.
- 3.7.9 Use of personal protective equipment (PPE), including maintenance, inspection, testing and cleaning, shall be in accordance with DOE STD-1212-2012.Chapter IV “Personal Protective Clothing and Equipment”.
- 3.7.10 As needed for the explosive work activity, electrical storm hazards and lightning protection shall be met as described in DOE STD-1212-2012 Chapter X “Electrical Storms and Lightning Protection”

3.8 Blasting Operations

- 3.8.1 All blasting operations shall be conducted under the supervision of a qualified explosives-use supervisor, and all loading and firing shall be directed and supervised by the explosives-use supervisor or designated alternate.
- 3.8.2 Blasting operations shall be coordinated with all contractor operations or subcontractors in the affected area.
- 3.8.3 Subcontractors shall contact the contractor’s POC 48 hours, 24 hours and 2 hours in advance of detonation.
- 3.8.4 Contractor’s POC: Notify the WCC in advance of the detonation both 24 hours prior and 2 hours prior and request explosive notifications (in accordance with the WCC Explosive Blasting Notification Checklist).
- 3.8.5 Flag persons shall be posted at all access points to danger areas to keep all unauthorized persons out.
- 3.8.6 Blasting signs shall be posted at all access points before each shot.
- 3.8.7 The explosives-use supervisor shall make sure that all employees are out of the blast area before firing a blast. Upon verification of the area being clear, the explosive-use supervisor shall notify the authorized and qualified person before initiation of the blast.

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- 3.8.8 The following loud warning signals (blasts on a warning horn) shall be used during blasting operations:
- A. Blast warning: 1-minute series of long signals 5 minutes before blast signal
 - A. Blast signal: series of short signals one minute before the shot (following the final inspection of the blast area for personnel)
 - B. All clear: prolonged signal following inspection of the blast area for hazards.
- 3.8.9 Electrically-fired explosives charges shall be fired with an electric blasting machine or a properly designed and installed power source.
- 3.8.9.1 Only solid copper wire of sufficient current-carrying capacity shall be used for explosives detonation, unless prior approval for the use of multi-strand blasting wire is obtained from the contractor's POC.
- 3.8.10 Electrical power shall be disconnected from the electrical blasting leads as follows:
- 3.8.10.1 The firing lead lines shall be disconnected from the blasting machine and shall be short-circuited (shunted) by twisting the wires together.
 - 3.8.10.2 Locking power switches shall be placed in the open or off position.
- 3.8.11 Blasting machines shall be secured in a manner that prohibits any use.
- 3.8.12 After each use of explosives, the detonation area shall be inspected after a minimum 5-minute waiting period.
- 3.8.12.1 All wires shall be carefully traced to search for unexploded charges and other hazards.
 - 3.8.12.2 The all-clear signal shall be sounded only after a satisfactory inspection of the area.
- 3.8.13 In the event of a misfire, a second attempt shall be made to detonate the explosives.
- 3.8.13.1 If the second detonation attempt fails, alternative measures shall be taken to secure the area, and the contractor's POC shall be notified.
 - 3.8.13.2 Misfired explosives shall be disposed of in accordance with a procedure or plan reviewed and approved by contractor.

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- 3.8.14 Multiple-component explosives (such as kinetics, carbo-ammonium nitrates, and slurries) shall be mixed, used, and stored only by an explosives-use supervisor experienced and qualified for the explosive to be used, and use of such components shall be controlled by a detailed explosives-use permit.

3.9 Unexploded Ordnance

- 3.9.1 Unexploded ordnance activities in the Mass Detonation Area must be performed in accordance with the contractor's DOE-ID-approved explosives safety site plan, PLN-4402, "Mass Detonation Area Explosives Safety Site Plan."

4. RECORDS

Records of explosive operations shall be generated and maintained as described below:

Type of Record	Submitted to Contractor's POC	Retained by Subcontractor for Duration of the Project.
Explosive use permit; FRM-2740	Yes	Yes
Explosive use plans	Yes	Yes
Training records, training plans, qualification requirements per DOE STD-1212-2012	Yes	Yes
Explosives custody logs	Yes	Yes
Explosives shipment inspection checklist FRM-2739	Yes	Yes

5. DEFINITIONS

Contractor. The company with the Department of Energy contract and all its duly authorized representatives acting in their professional capacity, in the performance of work at the Idaho Cleanup Project (ICP) at the Idaho National Lab (INL).

Contractor's point of contact (POC). Individual identified in the subcontract documents as the duly authorized representative for overseeing subcontractor work activities.

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Explosives. Any chemical compound or mechanical mixture that, when subjected to stimuli such as heat, impact, friction, or shock, undergoes a very rapid chemical change that releases large volumes of highly heated gases that exert pressure in the surrounding medium. Components not in themselves classed as explosives are not subject to the provisions of the Contractor explosives safety program until they are transported to a mixing or use site or placed near other components of the explosive.

Explosives custodian. A trained and experienced person who has been assigned responsibility for all explosive materials in an assigned area.

Explosive ordnance disposal (EOD) qualified personnel. EOD personnel who are graduates of the U.S. Army Bomb Disposal School, Aberdeen Proving Grounds, U.S. Naval EOD School, Eglin Air Force Base, or Indian Head, MD. These individuals will have EOD experience that may be a combination of active duty military EOD and contractor UXO experience. This will include experience in supervisory positions. Note: “UXO Personnel (UXO technicians and supervisors) is the term used for ex-military EOD personnel working as civilians or contractors.

Explosives-use supervisor. A person that meets all of the requirements for explosives worker and will normally be in charge of the explosive operation. This person has the requisite knowledge and experience of the specific operation to verify workers are adequately trained and capable of performing explosive tasks safely. This person will in most cases be the person with the most knowledge and experience on the specific operation.

Intraline distance. The distance to be maintained between any two operating buildings or sites within an operating line, at least one of which contains or is designed to contain explosives or blasting supplies.

Quantity distance. The distance required for a specific level of protection for a particular hazard class/division of ammunition and explosives.

6. REFERENCES

Source Documents 10 CFR 851, “Worker Safety and Health Program”

27 CFR 55, BATF, “Commerce in Explosives”

29 CFR 1910.109, “Explosives and Blasting Agents”

29 CFR 1926, Subpart U, “Blasting and the Use of Explosives”

40 CFR 264, 265.382, and 270, Resource Conservation and Recovery Act (RCRA) requirements applicable to disposal of explosives

49 CFR 171 through 173, U.S. Department of Transportation (DOT) Hazardous

49 CFR 390 through 397, Federal Motor Carrier Safety Regulations

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Bureau of Alcohol, Tobacco, and Firearms (BATF) P5400.7, “ATF Explosives – Laws and Regulations”

DESR 6055.09, Edition 1, “DoD Explosives Safety Standards”

DOE STD-1212-2012 , “Explosives Safety”

Institute of Makers of Explosives (IME) Safety Library publications, applicable pamphlets 1-22

MCP-2670, “Motor Carrier Operations”

PLN-320, “Transport Plan for the Movement of Explosive Materials within the Boundaries of the Idaho National Laboratory”

PLN-4402, “Mass Detonation Area Explosives Safety Site Plan” (Contractor document)

6.1 Related Requirements

The following documents may also contain requirements that apply to this activity:

PRD-2101, “Hazard Communication”

7. APPENDIXES

Appendix A, Explosives Safety Analysis

Appendix B, Explosives-Use Permit (Example)

Appendix C, Explosives Shipment Inspection Checklist

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Appendix A

Explosives Safety Analysis

This safety analysis details the strategy for the specific use of explosives, describes potential hazards, and outlines hazard mitigation.

The explosives safety analysis should include the following items, as a minimum:

1. A systematic identification of potential hazards
2. Analysis of potential consequences
3. Measures to eliminate or control the hazards
4. Documented management authorization of the operation based on an objective assessment.

The completed explosives safety analysis is attached to the associated explosives-use permit and becomes a part of that permit.

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Appendix B

Explosives-Use Permit (Example) FRM-2740

NOTE: *The current revision of FRM-2740 is available on the document control system and available from the contractor's POC*

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FRM-2740
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EXPLOSIVES USE PERMIT

TEM-6 (03/07/18 – Rev. 0)

Formerly Form 440.02

The following employees have demonstrated a working knowledge of safely handling and using explosives by formal training, and experience. They are authorized to perform explosive work at the _____ area for the period specified.

Designated Explosive Users/Handlers and Custodians meet the training requirement of 29 CFR 1910.109; 29 CFR 1926 Subpart U; and DOE STD-1212 as need to perform the explosive work activity

Designated Explosives User(s)/Handler(s): _____

Explosives Custodian: _____

Type of Explosives: _____ Quantity of Explosives: _____

Hazard Class: _____ Level of Protection: _____

Personnel Limits: _____

Date of Approval: _____

This permit is valid until: _____ To _____ / _____ From _____

The following controlling documents apply to this activity:

1. DOE STD 1212 Explosive Safety (current revision).
2. List all applicable Code of Federal Regulations.
3. List all applicable company policies and procedures.
4. List the job specific safety analysis report or job specific procedures to be used.

Operations shall comply with all applicable limits and procedures as specified in the above documents and those referenced therein.

Special Limitations: _____

Approvals:

_____	Date: _____
Project or Construction Manager Operations (Name)	
_____	Date: _____
Explosives SME (Name)	
_____	Date: _____
Project Safety and Health Manager (Name)	
_____	Date: _____
Industrial Safety and Health Senior Manager (Name)	

Special Provisions: _____

NOTE: Attachments or continuation sheets may be used if more space is needed.

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Appendix C

Explosives Shipment Inspection Checklist (FRM-2739)

NOTE: *The current revision of FRM-2739 is available on the document control system and available from the contractor's POC*

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DRF No. 362989
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EXPLOSIVES SHIPMENT INSPECTION CHECKLIST

TEM-6 (03/07/18 – Rev. 0)

Formerly Form 440.03

Date/Time/Place of Inspection: _____
Packaging & Transportation _____
Inspector(s) Name and S Number: _____
Explosive Custodian and Company _____
Driver(s) Name: _____
Carrier Name (if applicable): _____
Vehicle ID/License _____
Plate Number: _____ Date of Shipment: _____
Manifest Number: _____ Point of Origin: _____
Originator: _____ Planned Destination: _____
Explosives _____
Class/Hazard Div.: _____

Type/Manufacturer	Quantity	Explosives ID Marking
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
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TEM-6 (03/07/18 – Rev. 0)

EXPLOSIVES SHIPMENT INSPECTION CHECKLIST

DEFINITION	ACCEPT	REJECT	N/A
1. Are SDS, data sheets, and explosive testing data sheets available for each type of explosives shipped? [source - 49 CFR Parts 390-397, 29 CFR 1910.1200]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has approval of the explosive shipment been obtained and retained on site? [source Company Requirement]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are the shipping papers properly filled out? [source - 49 CFR Parts 390-397]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are the explosive placards written on a white background, in red lettering, and visible posted on all four (4) sides of the vehicle? [source - 29 CFR 1926.90 2(h) and 49 CFR 172.50b-51d]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is there any visible damage to the vehicle or explosive containers? [source 29 CFR 1910.109(d)]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is the vehicle chocked, brakes set, and the engine shut off, before inspection? [source - 29 CFR 109 (d)]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are any ignition sources or non-explosion proof electricals in the area? If not, the inspection may proceed. [source - 29 CFR 1910.109 (d)]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are there any detonators, EEDs, or primary explosives in the same lading as the secondary explosives? [source - 29 CFR 1910.109 (d)(1)(iv)]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Are there any incompatible explosives stored together? [source - DOE STD 1212 Explosive Safety, Chapter II, Section 17]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Does each package/container, containing explosives, produced by a licensed manufacturer, identify the manufacturer, location, date, and phone number of the manufacturer? [source - 49 CFR Subpart D]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Is each package to be stored at the site labeled with the explosive custodian's name, material name, and class/division/group? [source - DOE STD 1212 Explosives Safety, Chapter II, Section 17]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Is there evidence of aging, deterioration, or damage to the explosives or containers? [source - 49 CFR 171.2 (a)]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Does the transport vehicle have the following listed items?]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. Wheel chocks [source - DOE Explosives Safety Manual, Chapter II, Section 16]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Explosives placards on all sides [source - DOE STD-1212 Explosives Safety, Chapter II, Section 16]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Proper Inspection with approved checklist [source - DOE STD-1212 Explosives Safety, Chapter II, Section 16]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Rear view side mirrors on each side of the vehicle [source - DOE STD-1212 Explosives Safety, Chapter II, Section 16]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Two filled fire extinguishers: minimum rating of 2A:10BC; one inside the cab and one outside the vehicle [source - DOE Explosives Safety Manual, Chapter II, Section 16 and 29 CFR 1910.189 (d)]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. A positive means of securing, tie-down bolts, rings and straps, the explosives in the bed of the vehicle [source - DOE Explosives Safety Manual, Chapter II, Section 16]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. A quick disconnect on the battery if explosives are stored in the vehicle overnight [source - DOE STD-1212 Explosives Safety, Chapter II, Section 16]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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EXPLOSIVES SHIPMENT INSPECTION CHECKLIST

DEFINITION	ACCEPT	REJECT	N/A
h. A cargo area with no sharp projections [source – DOESTD-1212 Explosives Safety, Chapter II, Section 16]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Tires do not show excessive wear or damage [source - DOE Explosives Safety Manual, Chapter II, Section 16]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Spark arrestor if the motor is running while loading or unloading. [source – DOE STD-1212 Explosives Safety, Chapter II, Section 16]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Is each explosive magazine which will be transported on the INL capable of being properly secured to the transport vehicle and capable of being identified as such? [source - 49 CFR Parts 390-397]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Are explosive magazines labeled as to the contents and hazard class? [source - DOE Explosives Safety, Chapter II, Section 17]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Has a proper escort for the explosives, to be received at or shipped from the INL, been approved and arrangements made? [source - Company requirement]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DESCRIBE ANY PROBLEMS:

Signature: _____

Date: _____