Appendix B

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
REGION 6
1445 Ross Avenue
Dallas, Texas 75202-2733

MAR 18 2014

CERTIFIED MAIL - RETURN RECEIPT REQUESTED: 7012 3050 0001 6500 4561

The Honorable Katherine Hammack
Assistant Secretary of the Army
(Installations, Energy and Environment)
Office of the Assistant Secretary of the Army
110 Army Pentagon, Room 3E464
Washington, DC 20310-0110

Re: RCRA Section 7003 Unilateral Administrative Order
Explo Systems, Inc. Site, Camp Minden, Louisiana

Dear Ms. Hammack:

Enclosed please find a Unilateral Administrative Order (UAO) issued to the United States Department of the Army (Army) by the United States Environmental Protection Agency (EPA) relating to the former Explo Systems, Inc. Site on Camp Minden, Louisiana. This UAO is issued pursuant to Section 7003 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6973. The UAO requires the Army to eliminate the imminent and substantial endangerment posed by the 15 million pounds of M6 propellant stored at Camp Minden, Louisiana. You should note that the UAO will become effective within eleven (11) calendar days of its receipt unless a conference is requested with the EPA Assistant Administrator of the Office of Enforcement and Compliance Assurance within ten (10) calendar days of receipt. Also note that the Army must notify EPA in writing of its intent to comply with the UAO no later than five (5) calendar days after its effective date.

If you have any questions, please contact Evan L. Pearson, Senior Enforcement Counsel, at (214) 665-8074, or by e-mail at pearson.evan@epa.gov. Your prompt attention to this matter is appreciated.

Sincerely,

John Blevins
Director
Compliance Assurance and
Enforcement Division

Enclosure

707697

Re: RCRA Section 7003 Unilateral Administrative Order
Explo Systems, Inc. Site, Camp Minden, Louisiana

cc: Peggy Hatch, Secretary, Louisiana Department of Environmental Quality
Colonel Ronnie Stuckey, Commander, Camp Minden, Louisiana
David J. Kling, Director, Federal Facilities Enforcement Office

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6
DALLAS, TEXAS

FILED
2014 MAR 13 PM 2:24
REGIONAL HEARING CLERK
EPA REGION VI

| | | |
|---|---|---|
| IN THE MATTER OF: | ) | |
| THE UNITED STATES DEPARTMENT OF THE ARMY | ) | U.S. EPA DOCKET NUMBER RCRA-06-2014-0902 |
| RESPONDENT | ) | |

UNILATERAL ADMINISTRATIVE ORDER

Proceeding under Section 7003(a) of the
Resource Conservation and Recovery Act, as amended,
42 U.S.C. § 6973(a)

## TABLE OF CONTENTS


I. INTRODUCTION ..... 1

II. JURISDICTION ..... 1

III. PARTIES BOUND ..... 2

IV. FINDINGS OF FACT ..... 2

V. CONCLUSIONS OF LAW AND DETERMINATIONS ..... 15

VI. ORDER ..... 16

VII. WORK TO BE PERFORMED ..... 16

VIII. DESIGNATION OF PROJECT MANAGERS AND CONTRACTOR(S) ..... 22

IX. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS ..... 22

X. MODIFICATION OF WORK PLANS ..... 23

XI. QUALITY ASSURANCE, SAMPLING, AND ACCESS TO INFORMATION ..... 24

XII. PUBLIC ACCESS TO THE ADMINISTRATIVE RECORD ..... 25

XIII. ACCESS ..... 25

XIV. NOTICES ..... 27

XV. FORCE MAJEURE AND EXCUSABLE DELAY ..... 28

XVI. RESERVATION OF RIGHTS ..... 29

XVII. OTHER APPLICABLE LAWS ..... 30

XVIII. RECORD RETENTION ..... 30

XIX. ADDITIONAL WORK ..... 30

XX. ENFORCEMENT ..... 31

XXI. TERMINATION ..... 31

XXII. GENERAL PROVISIONS ..... 31

XXIII. NOTICE OF NON-LIABILITY OF EPA ..... 31

XXIV. NOTICE OF INTENT TO COMPLY ..... 32

XXV. ANTI-DEFICIENCY ACT ..... 32

XXVI. OPPORTUNITY TO CONFER ..... 32

XXVII. EFFECTIVE DATE ..... 33

## I. INTRODUCTION

1. This Unilateral Administrative Order (UAO) is issued to the United States Department of the Army (Army) by the United States Environmental Protection Agency (EPA) to protect the public health and the environment. This UAO requires the Army to eliminate the imminent and substantial endangerment posed by the 15 million pounds of M6 propellant stored at Camp Minden, Louisiana.

2. EPA has determined that the Respondent has contributed to or is contributing to the past or present handling, storage, treatment, transportation or disposal of solid waste and/or hazardous waste that may present an imminent and substantial endangerment to health or the environment. Specifically, the actions and the lack of oversight by the Respondent contributed to the improper handling and storage of approximately 15 million pounds of M6 propellant. The improper storage and handling increased the rate of the degradation of the stabilizers in the M6 propellant and compromised propellant lot integrity. There is an imminent and substantial risk that the M6 propellant (which is stored in proximity to 3 million pounds of other explosives) may auto-ignite, and cause a substantial explosion. The probability of a substantial explosion is greatly increased if the M6 propellant is left in storage and not addressed within the time specified in this UAO.

3. EPA has notified the State of Louisiana of this action pursuant to Section 7003(a) of RCRA, 42 U.S.C. § 6973(a).

## II. JURISDICTION

4. This UAO is issued to protect public health and the environment pursuant to Section 7003(a) of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), and further amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), 42 U.S.C. § 6973. Section 7003(a) of RCRA authorizes the Administrator of the EPA to issue an Order whenever the Administrator receives evidence that the past or present handling, storage, treatment, transportation, or disposal of any solid waste or hazardous waste may present an imminent and substantial endangerment to health or the environment. The authority to issue this UAO has been delegated by the Administrator of EPA to the Regional Administrator, EPA Region 6, by EPA Delegation Nos. 8-22-A and 8-22-B, dated May 11, 1994, and No. 8-23, dated March 6, 1986, and further delegated to the Director of the Compliance Assurance and Enforcement Division, Region 6 (Director) by Delegations No. R6-8-22-A, dated July 27, 1995, No. R6-8-22-B dated August 3, 2001, and No. R6-8-23, dated July 27, 1995.

## III. PARTIES BOUND

5. This UAO shall apply to and be binding upon the Respondent, its officers, agents and assigns, and upon all other persons and entities who are under the direct or indirect control of the Respondent.

6. The Respondent shall provide a copy of this UAO to all of its supervisory personnel, contractors, laboratories, and consultants retained to conduct or monitor any portion of work performed pursuant to this UAO within seven (7) days of the effective date of this UAO or date of such retention, whichever is later, and shall condition all contracts with the aforementioned on compliance with the terms and conditions of this UAO. The Respondent shall instruct all supervisory personnel, contractors, laboratories, and consultants retained to conduct or monitor any work pursuant to this UAO to perform such work in accordance with the requirements of this UAO.

## IV. FINDINGS OF FACT

7. The Respondent, the United States Department of the Army (Army), is a department of the executive branch of the Federal Government and is subject to the requirements of Section 6001 of RCRA, 42 U.S.C. § 6961.

8. Camp Minden, Louisiana consists of approximately 14,995 acres, and was formerly known as the Louisiana Army Ammunition Plant (LAAP). LAAP's primary function was to load, assemble, and pack munitions, and manufacture ammunition metal parts. Burning and demolition activities were also performed to destroy explosives and explosive wastes generated by manufacturing of munitions. The above activities resulted in soil and groundwater contamination. EPA placed LAAP on the National Priorities List in March 1989.

9. On or about January 1, 2005, the Army transferred ownership of the LAAP to the State of Louisiana. The Louisiana Military Department (LMD) was designated to accept the property on behalf of the State of Louisiana. The property was re-named Camp Minden, Louisiana. The LMD is authorized by the State of Louisiana to lease the State's real property at Camp Minden. LMD entered into leasing agreements with Explo Systems, Inc. (Explo), which allowed Explo to use a portion of the property, and certain magazines and buildings to perform activities required under demilitarization contracts Explo entered into with the Army and other entities.

10. The Explo Systems, Inc. Site (Site) includes buildings, outside storage areas and vacant land located in Area S, and storage magazines located in Areas L-1, L-2, L-3, and L-4 of Camp Minden, Louisiana.

11. On or about January 21, 2010, Explo submitted to the Army a "Proposal for Demilitarization of Charge, Propelling, 155 MM, M119A2 DODIC D533 NSN: 1320-01-093-6856" (Proposal) in response to a solicitation for demilitarization of M6 propellant.

12. The M6 propellant is a mixture of approximately 87% nitrocellulose (flammable solid), 10% dinitrotoluene, 3% dibutyl phthalate, 2% potassium sulfate, and 1% diphenylamine. M6 propellant, primarily due to its nitrocellulose, is readily capable of explosive decomposition or reaction at standard temperature and pressure. Chemical ingredients known as stabilizers are added to M6 propellant during manufacturing to prevent self-ignition during the useful life of the M6 propellant.

13. Under its Proposal, Explo planned to send the demilitarized M6 propellant to its Kentucky facility (located at the Kentucky Powder Company site), with the Explo Site being used only for short-term storage. Explo also stated in its Proposal that it would use the demilitarized M6 propellant at its slurry facility in Kentucky.

14. Neither Kentucky Powder nor Explo had the necessary permits to store explosives in Kentucky in 2010.

15. On March 24, 2010, the Army awarded a firm-fixed price contract to Explo for the demilitarization of 450,000 M6 artillery charges, Contract No. W52P1J-10-C-0025 (Contract). The Contract defines demilitarization as "the act of removing the military offensive or defensive advantages of ammunition and explosives, which may or may not include the disposal of the item."

16. Under the terms of the Contract, the Army agreed to pay Explo $2,902,500 for the demilitarization of 450,000 artillery charges. Section 3.1 of Contract required Explo to establish a program for the receipt, storage, handling, demilitarization and disposal of propelling charges in accordance with specific guidance provided in the Statement of Work portion of the Contract. Section 7.6 of the Contract provided that "propellant tested and assigned category "D", or very small quantities, or otherwise not suitable for recycling/reuse will be disposed of within 60 days. . . ." Section 11.1 of the Contract stated that the artillery charges were excess and/or obsolete munitions. The Army amended the Contract several times to increase the amount of artillery charges to be addressed, as well as change the payment provisions. As of March 8, 2012, the Army agreed to pay Explo a total of approximately $8,617,500 for the demilitarization of 1,350,000 artillery charges containing M6 propellant.

17. Pursuant to the Contract, on or about April 19, 2010, Explo submitted a Safety Site Plan to the Army. The Safety Site Plan stated that "empty propelling charge bags and empty CBI bags will be sent to an approved land fill or to the SDC-1200 for processing." The SDC [Static Detonation Chamber] 1200 is a unit which could thermally treat military munitions. On or about December 10, 2009, Explo received a permit to operate the SDC 1200 unit from the Louisiana Department of Environmental Quality (LDEQ). Hazardous Waste Operating Permit LAR000032607-RDD-1. However, the SDC 1200 unit was never constructed.

18. The Army certified the Safety Site Plan even though the SDC-1200 unit had not been constructed.

19. In accordance with Paragraph 4.1 of the Contract, on or about June 8, 2010, Explo submitted an Ammunition Demilitarization and Disposal Plan (Demilitarization Plan) to the Army for approval. EPA does not have information whether the Army approved the Demilitarization Plan. The Demilitarization Plan stated that Category D M6 propellant would be destroyed within 30 days via the SDC 1200. However, there was no SDC 1200 unit at the Explo Site.

20. According to Army Supply Bulletin (SB) 742-1 – *Ammunition Surveillance Procedures*, Section 13.9, page 13-6, Stability Category D propellant is characterized as having an "unacceptable stabilizer loss." "Lots identified as stability category "D" present a potential safety hazard and are unsafe for continued storage as bulk, bulk-packed components, or as separate loading propelling charges. Bulk propellant, bulkpacked components, and separate loading propelling charges will be demilitarized within 60 days after notification of category "D" status."

21. Army officials visited the Kentucky Powder facility in May 2010. Army representatives were shown the blueprints and footings for a slurry plant operation during the visit. However, there was no operational slurry facility there at that time. Contrary to its Proposal, Explo could not recycle the M6 propellant into blasting material to be used in mining operations.

22. In June 2010, the Army sent the first shipment of artillery charges to Explo even though Explo: (1) did not have permits to store explosives at its Kentucky facility; (2) had not constructed its slurry facility in Kentucky; and (3) had not constructed the SDC 1200 unit at the Explo Site, which was needed to destroy any Class D M6 propellant.

23. Paragraph 13.2 of the Contract provided that title to the recovered propellant would pass to Explo upon completion of all required demilitarization operations as documented in Explo's technical proposal and demilitarization proposal plan. As such, under the Contract, the Army retained ownership of all of the components and materials throughout the demilitarization process.

24. According to Explo's Demilitarization Plan, the demilitarization process began with the removal of the M6 charge bag from its canister, which was then placed on a disassembly table. An operator cut the bag open to allow the propellant to flow into a designated container. The base igniter pad was cut away from the propelling charge bag, placed into a designated container, and then transferred to the separation station. The black powder spot and clean burning igniter (CBI) bag were separated at the separation station, and then placed into separate containers. Potassium sulfate was removed from the empty red bag and placed into a designated container for storage. Lead foil was to be separated and placed into a designated container for storage, shipping, and recycling. Empty canisters, along with the various containers listed above were supposed to be sent to various vendors for recycling.

25. Paragraph 13.4 of the Contract provided that title to the recovered material/components would pass to Explo upon Government inspection and acceptance. This would be

accomplished through a certificate of destruction (COD). The CODs would certify that the demilitarization operation has been completed for the charges that went through the demilitarization process. After demilitarization was complete, Explo would prepare a COD for signature by a representative of the Defense Contract Management Agency (DCMA).

26. The DCMA is an agency of the Department of Defense (DoD). DCMA performs contract administration services for DoD. The DCMA Ammunition Group was in charge of administering the Explo Contract for the Army. A DCMA Quality Assurance Representative would visit the Explo site weekly to sign the CODs. The DCMA Quality Assurance Representative relied on Explo's representations regarding the completion of the demilitarization and final disposition of those materials and signed the CODs without independently verifying the statements made to them by Explo representatives that the demilitarization process had been completed.

27. The DCMA Quality Assurance Representative did not go into the contractor operations areas and/or magazines. The DCMA Quality Assurance Representative told an EPA official that it was always escorted by an Explo representative and therefore they had no idea what was ". . . on the other side of the wall". The DCMA Safety Inspector did not go into the operational or storage areas at the Explo Site during the quarterly safety reviews.

28. According to Explo's November 2012 Progress Report, Explo reported that approximately 1,146,995 artillery charges have been demilitarized. Each charge contained approximately 20.6 pounds of M6 propellant. Mathematically, if Explo recovered 20.5 pounds of M6 propellant from each charge, approximately 23,513,397 pounds of M6 propellant would have been recovered.

29. In order to sell the M6 propellant to customers, Explo had to prepare end use certificates (EUC). A review of the EUCs for the M6 propellant from July 8, 2010 through October 15, 2012 shows that Explo claimed to have sold 18,502,810 pounds of the approximately 23,513,397 pounds of M6 propellant that should have been recovered. Therefore, there should have been approximately 5,014,587 pounds of M6 propellant at the Explo Site at the end of November 2012.

30. Despite what Explo claimed in the EUCs, Explo was unable to sell the majority of the M6 propellant that it demilitarized. Explo has sold or transferred off-site approximately 5,713,397 pounds of M6 propellant, which means that there were approximately 17,800,000 pounds at Camp Minden. Thus, approximately 75.7% of the M6 propellant remained at Camp Minden. In addition, in January – February 2012, Boren Explosives returned approximately 292,160 pounds of M6 propellant it had previously purchased from Explo because the M6 propellant did not perform as it had been represented to them.

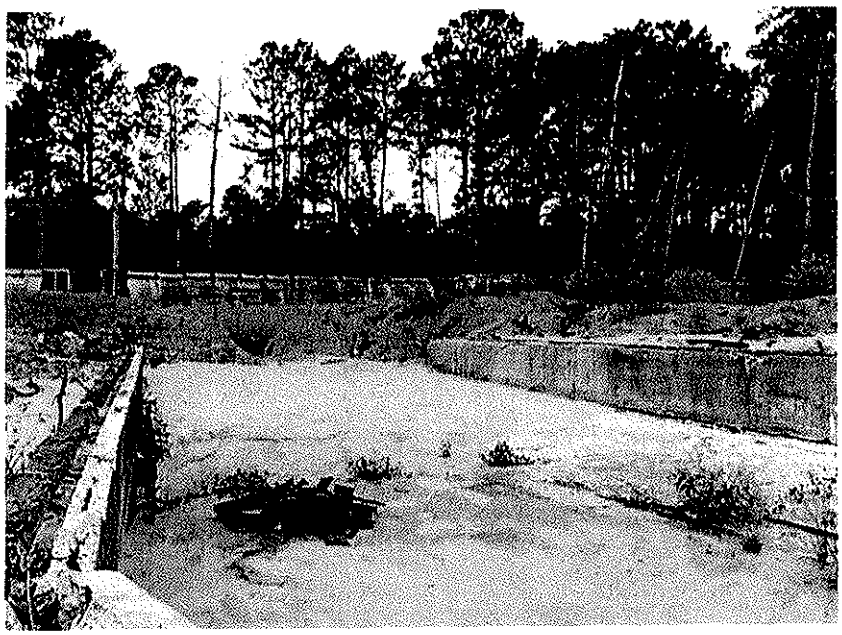
31. An explosion of a magazine containing 124,190 pounds of smokeless powder and a box van trailer containing 42,240 pounds of M6 propellant occurred at Camp Minden on

October 15, 2012. Both the magazine and the trailer were completely destroyed. The explosion shattered windows in Minden, Louisiana (approximately 4 miles northeast) and as reported by the media, produced a 7,000 foot mushroom cloud. The explosion resulted in the complete destruction of the magazine containing the material, and derailed eleven railcars. The total area of destruction and contamination was approximately 1,250 feet by 1,250 feet. Photo No. 1 (below) provides an aerial view of the explosion's aftermath. Photos Nos. 2 and 3 (next page) show the aftermath of the destruction of the magazine. The material was stored in the trailer (contrary to the contract and safety practices). The Louisiana State Police (LSP) in its October 16, 2012 inspection identified four potential explosive safety violations. Despite this explosion, the Army continued shipments of the artillery charges until November 2012.

Photo No. 1

Photo No. 2

Photo No. 3



32. As a result of the violations observed during the inspection of the explosion, the LSP executed a search warrant at the Explo Site on November 27, 2012. During the search, the LSP identified approximately 10 million pounds of unsecured and improperly and illegally stored M6 propellant. The M6 propellant was stored in various containers, including 60 pound boxes, various size barrels, and 880 pound bulk boxes throughout the buildings, hallways, and outside the Explo Site, where it was exposed to the elements. See photos 4 – 7 below. When the warrant was executed, there were approximately 17.8 million pounds of M6 propellant at the Explo Site.

Photo 4 (Nov. 2012)

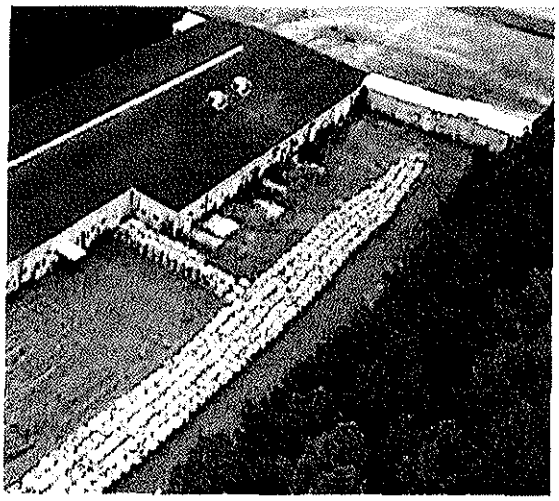


Photo 5 (Nov. 2012)

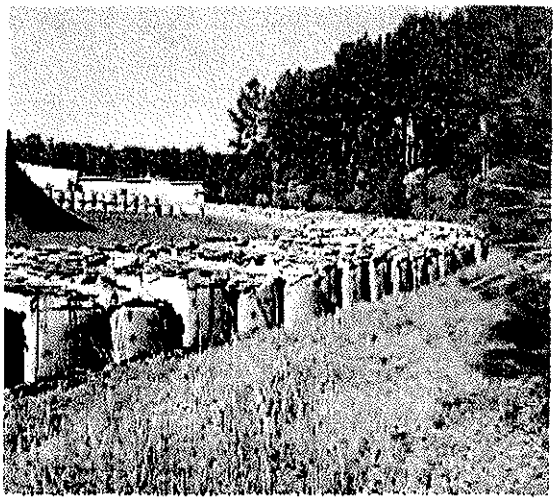


Photo 6 (Jan. 2013)

Photo 7 (Jan. 2013)

33. Large parts of Camp Minden were closed for several months. From November 28, 2012 through May 20, 2013, the LSP and Explo secured and stored the M6 propellant in magazines at Camp Minden. From November 30, 2012 through December 7, 2012, a voluntary evacuation of the town of Doyline, Louisiana (population 800) took place during operational hours due to the risk of explosion from the M6 propellant.

34. Because there was insufficient storage space at Camp Minden, Explo transferred 2.8 million pounds of M6 propellant from Camp Minden to an Austin Powder facility in East Camden, Arkansas during the period from November 2012 until sometime in 2013. Approximately 200,000 pounds of this M6 propellant was later sold. Currently, approximately 15 million pounds of M6 propellant is stored in the magazines at Camp Minden.

35. The M6 propellant processed at Camp Minden is an artillery propellant comprised of 87% nitrocellulose, which is subject to degradation with aging, the end result being spontaneous combustion. Chemical ingredients known as stabilizers are added to the M6 propellant during manufacturing to prevent self-ignition during the useful life of the M6 propellant. The stabilizers added to the M6 propellant degrade or deteriorate over time, and exposure to heat and humidity accelerates the degradation or deterioration of said stabilizers. For these reasons, the Army mandates a propellant stability monitoring program for propellants it owns or stores to periodically test this and similar types of propellant stability.

36. Section 13-2 of the Army's SB-742-1 – *Ammunition Surveillance Procedures* includes the following warning in bolded text:

Nitrocellulose-based propellants can become thermally unstable as they age. The normal aging process of the propellants involves deterioration of the nitrocellulose with an accompanying generation of heat. At some point, the propellant may reach a state where heat is generated faster than it can be dissipated. The accumulation of heat can lead to combustion (autoignition). Chemical stabilizers are added to propellants to slow the aging process. In time, the stabilizer levels will drop to a point where the remaining effective stabilizer (RES) is not sufficient to prevent an accelerating rate of decomposition. When this point is reached, the propellant may auto-ignite, with possible catastrophic results to property and life. Monitoring the stability level of each propellant lot is essential for continued safe storage.

37. According to Section 1-3 of the U.S. Army's Defense Ammunition Center's *Propellant Management Guide*:

Among commonly stored energetic materials, nitrate ester-based propellants (principally nitrocellulose-based ones) have the propensity to self-ignite (auto-ignite) without warning while in static storage; catastrophic losses can result. Artillery and small arms propellants are perhaps the most dangerous and suspect materials that Army installations regularly and routinely handle and store. Propellant can be unpredictable, decomposing into an unstable condition within four or five years of manufacture. Inadequate propellant safety programs have contributed to several self-ignition incidents at U.S. Army installations.

38. Much of the M6 propellant at Camp Minden was exposed to heat and humidity over an unknown period of time due to improper storage. Additionally, Explo had not implemented a propellant stability monitoring program for the M6 propellant stored at

Camp Minden. Therefore, the M6 propellant cannot be safely transported or recycled unless the M6 propellant's stability is determined. Section 7.1 of the Contract provided that "propellant recovered from the disassembly operation shall be kept separately by propellant type and lot number until stability testing has been completed to determine final disposition. Thereafter, propellant will be retained by type and lot number."

39. According to the Army's SB 742-1, *Ammunition Surveillance Procedures*, Section 13-14, "propellants with lost lot identity cannot be tested to determine current level of stabilizer, since the specific propellant index cannot be identified. Therefore, these lots represent a potential safety hazard. Propellant with lost lot identity will not be retained in storage in any account. Propellant with lot numbers "MIXED," UNKNOWN," or "NONE," as part of the lot number will be demilitarized within 60 days of discovery."

40. On or about April 2 - 3, 2013, a team of technical experts from the Department of Defense (DoD) Explosive Safety Board and the U.S. Army Technical Center for Explosives Safety visited Camp Minden to assess the stored propellant and make recommendations. The team issued a Report dated April 18, 2013 (Report No. 1). According to Report No. 1, some M6 propellant storage boxes were not labeled with the manufacturer's propellant lot number and/or the lot number was not readable. Propellants with lost manufacturer lot identify represent a potential safety hazard. In addition, Report No. 1 noted violations of DoD explosive safety quantity distance and explosive safety compatibility and mixing rules.

41. In addition, Report No. 1 highlighted the problem of long-term storage of the M6 propellant:

The preponderance of evidence indicates that the probability of an explosives event directly related to the long-term storage of M6 propellant at Minden is likely. That is: (a) anecdotal evidence indicates that the "kicker boxes" of propellant may contain multiple Lots, instead of the single Lot number indicated on the "blue" labels; (b) due to the unknown storage conditions for M6 propellant after its removal from the propellant charge cans, the propellant's stability cannot be guaranteed; and (c) the bulk packaging (white bag, fiber drum or cardboard box) is not a standard packaging method for long-term storage of M6 propellant. The use of such bulk packaging may (a) not prevent the loss of stabilizer; (b) allow moisture intrusion; and (c) increase nitro-cellulose decomposition rates. These factors, combined with nitro-cellulose's ability to auto-ignite, increase the probability of a detonation within a storage structure at Camp Minden within 10 years.

42. A lot at the Explo Site of approximately 21,000 pounds of M6 propellant was identified as unstable and was destroyed in April – May, 2013.

43. On May 7 – 9, 2013, a technical assistance team from DoD and the Army visited Camp Minden again, and issued a second Report dated June 13, 2013 (Report No. 2). Report No. 2 stated the following:

Low stability content can result in auto-ignition of propellant in storage, causing a detonation. At Camp Minden, Explo's operations appear to have resulted in the loss of lot identity for the M6 propellant that Explo has in storage. Explo's packaging configurations (e.g., incorrect lot markings on containers and outer-packs, multiple markings); storage procedures, which exposed some of the packaged propellant to the environment; and packaging process, which may have mixed lots led the technical assistance visit team to conclude that lot identity was, at a minimum, questionable. Explo did not have a propellant stability monitoring program in place. Although the transfer of M6 propellant to earth covered storage has reduced the risk to public safety, an explosive event (i.e., a detonation) from auto-ignition is very possible.

44. Due to Explo's mixing of the "lots" of the M6 propellant and the lack of a stability monitoring program, the Army's Propellant Monitoring Program detailed in the Army's *Propellant Management Guide* cannot adequately predict the degradation of the propellant by lot number and cannot determine which lot is stable or unstable. The Army document, *Prediction of Safe Life of Propellants* written by N.S. Garman, et al., Picatinny Arsenal, New Jersey (May 1973), states on page 1 that, "the measurement of residual stabilizer content offers the best means of establishing the stability potential of these materials."

45. Explo failed to handle the M6 propellant as a valuable product. Contrary to the safety requirements of the Contract, Explo stored the M6 propellant outside where it was exposed to heat and humidity, which increases the degradation of the stabilizers in the M6 propellant. Explo failed to implement a stability monitoring program and failed to maintain lot integrity for the M6 propellant stored at the Explo Site. Thus, there is no record as to stability of the material stored at the Explo Site. Thus, the Respondent failed to exercise proper oversight of the Contract and did not ensure safe handling and storage of the M6 propellant. Failure to handle and manage the material properly increases the risk of explosion.

46. Additional investigation of the Explo Site revealed the improper storage of other materials in addition to the M6 propellant. For example, Report No. 2 shows the materials stored at the Explo Site include:

A. 128 pounds of black powder;
B. 200 pounds of Composition H6;
C. Four 50-gallon drums of ammonium perchlorate;
D. Two 50-gallon drums and 150 pound boxes of Explosive D (ammonium picrate);
E. 109,000 pounds of M30 propellant;
F. 320,000 pounds of Clean Burning Incendiary (CBI);
G. 661,000 pounds of nitrocellulose;
H. 1.817 million pounds of tritonal;
I. Several 16 ounce bottles and a large tank of Super Critical Water Oxidation Unit influent.

47. Due to the threat of explosion and injury to workers on-site and nearby residents, the LSP revoked Explo's explosive material licenses pending revocation proceedings on or about May 20, 2013. Explo was required to relinquish the keys to all magazines containing the explosives at Camp Minden. Therefore, Explo abandoned all of its property in the magazines, including the M6 propellant. Thus, Explo could no longer engage in the business of dismantling, recycling, and disposing of M6 propellant.

48. On or about June 10, 2013, a ten count indictment against Explo and six of Explo's officers and employees alleging various violations of Louisiana state law relating to explosives was returned by a Webster Parish, Louisiana grand jury.

49. During a meeting with EPA on August 1, 2013, a DoD representative of the Army's Technical Assistance Visit Team indicated that the likelihood of a magazine explosion occurring was in the range of two – ten years due to instability concerns resulting from improper storage exposing the propellant to heat and moisture and loss of lot integrity and identification.

50. The M6 propellant is subject to regulation by the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF). Therefore, Explo was required to have a Federal Explosives License to either engage in the business of dealing, transporting, shipping of M6 propellant or causing M6 propellant to be transported or shipped. The ATF revoked Explo's license as a manufacturer and importer of explosives effective August 5, 2013, because Explo was under indictment for a crime punishable by imprisonment of a term of more than one year and because Explo failed to properly store the M6 propellant in accordance with the applicable law. Therefore, Explo could no longer engage in the business of dealing, transporting, shipping, or causing the M6 propellant to be transported or shipped.

51. On or about August 12, 2013, Explo filed for Chapter 11 bankruptcy in the United States Bankruptcy Court, Western District of Louisiana, Shreveport Division, Case No. 13-12046.

52. On or about September 6, 2013, the Governor of the State of Louisiana issued Proclamation No. 129 BJ 2013, which declares a state of emergency at Camp Minden based on Explo's failure to provide for the "monitoring, removal, or disposal of approximately 18 million pounds of M6 propellant and other explosives, which pose a continuing threat to the safety of citizens and property of the State in and around Camp Minden."

53. On or about September 20, 2013, the U.S. Bankruptcy Court granted the Motion of the Louisiana State Department of Public Safety and Military Department to take all actions necessary under State law to take possession of and to confiscate the explosives owned by Explo and located at Camp Minden (which includes the 15 million pounds of M6 propellant), and to take possession of all leased premises and premises where the explosives were stored after October 12, 2012. The Bankruptcy Court also terminated all leases between Explo and the LMD.

54. On or about September 30, 2013, the U.S. Bankruptcy Court approved an Agreement between Explo and LMD transferring title to the M6 propellant and other explosives located at Camp Minden from Explo to the LMD.

55. The primary threat from the 15 million pounds of M6 propellant and the 3 million pounds of other explosives at Camp Minden is the explosion potential. In Report No. 1, the Army recommended that based on the condition and known hazards associated with the M6 propellant, the M6 propellant be sold or if necessary, destroyed by controlled open burning.

56. The Army removes propellants from its stockpiles because of age and the degradation of the stabilizer. The illegal storage of the M6 propellant by Explo accelerated the associated degradation of the stabilizers. Explo was unable to secure enough magazine storage space and stacked the supersacks filled with the M6 propellant outside on roadways and fields. Exposed to direct sun and moisture, the stabilizer degraded even faster.

57. The likelihood of an explosion within one or more of the 97 magazines containing 18 million pounds of high explosives increases each day. The stabilizers in the M6 propellant continue to degrade and there is no stability monitoring program to identify the lots at greatest risk of explosion. The degradation of the stabilizers will continue as long as M6 propellant remains in storage. Unstable lots of explosives may be located in many of the 97 magazines.

58. The storage of the M6 propellant in the magazines does not comply with relevant safety regulations and practices. Many of the boxes containing the M6 propellant are damaged and/or crushed. There is no aisle space in many of the magazines. Containers are placed directly against interior walls, in violation of 27 C.F.R. § 555.214(a) (Photos Nos. 8 – 11 below).

Photo No. 8 (Oct. 2013)

Photo No. 9 (Oct. 2013)

Photo No. 10 (Oct. 2013)

Photo No. 11 (Oct. 2013)

59. Large pine trees and/or heavy vegetation are growing on the tops and sides of the magazines. Photos Nos. 12 – 15 below were taken of a magazine in Area L-2. Photos 16 – 17 (next page) were taken of another magazine in Area L-2. The pine trees' roots could breach the concrete ceiling and walls of the magazines, thus compromising the structural integrity of the magazines, and preventing the magazines from performing as intended.

Photo No. 12 (Jan. 2014)

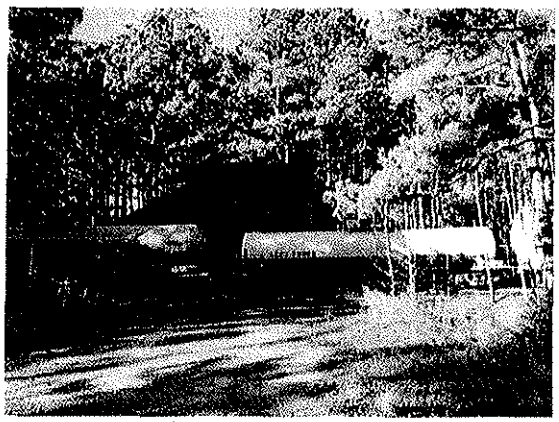


Photo No. 13 (Jan. 2014)

Photo No. 14 (Jan. 2014)

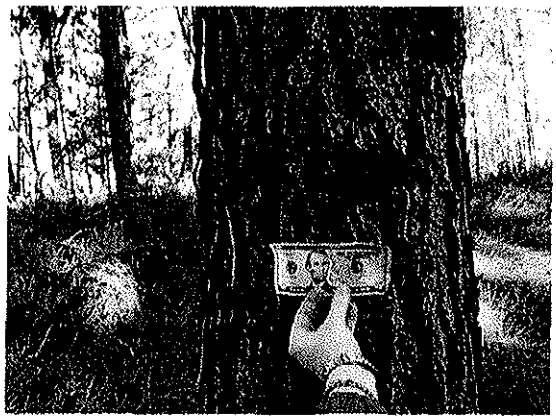
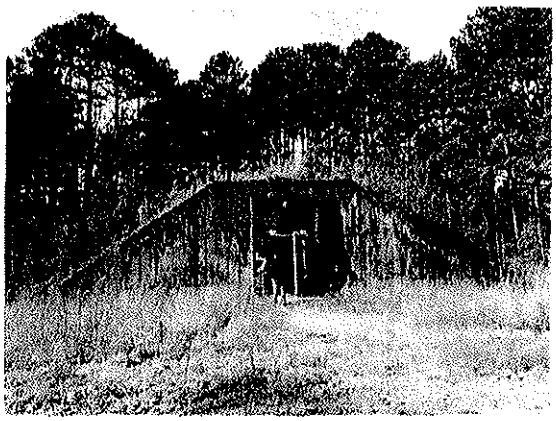


Photo No. 15 (Jan. 2014)

Photo No. 16 (Jan. 2014)

Photo No. 17 (Jan. 2014)



60. The National Guardsmen stationed or training on Camp Minden, the students at the Youth Challenge Program School on Camp Minden, the employees at the other commercial facilities as well as the citizens of Minden, Doyline, and the surrounding area are at risk from the impact of explosions.

61. An explosion from the M6 propellant would destroy a large area of trees and vegetation, along with any wildlife in the blast area.

## V. CONCLUSIONS OF LAW AND DETERMINATIONS

62. The Respondent Army is a "person" as that term is defined in Section 1004(15) of RCRA, 42 U.S.C. § 6903(15).

63. "Solid waste" is defined at Section 1004(27) of RCRA, 42 U.S.C. § 6903(27), as "any garbage, refuse, sludge from a waste treatment plant or water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid,

semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from communities activities. . .".

64. "Hazardous waste" is defined at Section 1004(5) of RCRA, 42 U.S.C. § 6903(5), as a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

65. Solid waste and/or hazardous wastes have been or are being handled and stored and/or disposed of at the Explo Site within the meaning of Section 7003 of RCRA, 42 U.S.C. § 6973.

66. The Respondent has contributed or is contributing to the handling and storage and/or disposal of solid waste and/or hazardous waste at the Explo Site.

67. The past and/or present handling and storage and/or disposal of solid waste and/or hazardous waste at the Explo Site may present an imminent and substantial endangerment to health or the environment.

68. The actions described in Section VII of this UAO are necessary to protect public health and the environment in and around the Explo Site.

## VI. ORDER

69. Based on the foregoing Findings of Fact, Conclusions of Law and Determinations, and the administrative record, **IT IS HEREBY ORDERED** that the Respondent shall perform all actions required by this UAO and comply with all its provisions. The Respondent shall fully cooperate with EPA representatives in carrying out all actions required by this UAO as well as all provisions in this UAO.

## VII. WORK TO BE PERFORMED

70. The Respondent shall develop, submit, and implement the following plans related to the 15 million pounds of M6 propellant currently stored at Camp Minden

### A. M6 Propellant Work Plan

71. Within fifteen (15) days of the effective date of this UAO, the Respondent shall submit to EPA for approval, with a copy to LDEQ and LMD, a plan for the elimination of the imminent and substantial endangerment posed by the 15 million pounds of M6 propellant currently stored at Camp Minden (M6 Propellant Work Plan). The M6 Propellant Work Plan shall be a "stand alone" document and shall be certified by a registered professional

engineer or other certified professional individual knowledgeable of such actions as are required by this UAO and further defined by the Plan.

72. The M6 Propellant Work Plan shall be designed to protect human health and the environment and shall minimize hazardous waste releases to the environment, including air, soil, surface waters, and groundwater. The purpose of the Plan is to eliminate the imminent and substantial endangerment posed by the M6 propellant. The Respondent shall also include provisions in the Work Plan to provide for and maintain proper storage containers and aisle space allowing for inspection and monitoring during the pendency of the remedy.

73. The M6 Propellant Work Plan shall include an on-site open burning/open detonation remedy. The Work Plan may also include:

a. Other on-site treatment/disposal options that do not include open burning/open detonation;
b. Off-site treatment/disposal options;
c. Options for sale, recycling, and/or reuse of the M6 propellant; and
d. Any other options that may eliminate the imminent and substantial endangerment posed by the M6 propellant.

If the M6 Propellant Work Plan includes any options that involve off-site transportation of the M6 propellant, the Respondent shall include a Stability Testing and Monitoring Plan for the M6 propellant. The purpose of the Stability Testing and Monitoring Plan is to ensure that the M6 propellant is stable in the event that it is sold or transported off-site.

Any options regarding the sale, recycling, and/or reuse of the M6 propellant shall include an analysis demonstrating that the option meets the criteria set forth in the "Lowrance Memo", OSWER Directive 9441.1989(19).

74. The M6 Propellant Work Plan for the on-site open burning/open detonation remedy shall include, but is not limited to, the following:

a. Burning ground site safety plan;
b. Standard Operating Procedures;
c. Qualifications and responsibilities or tasks for the personnel involved (e.g., supervisor, technical support, surveillance personnel);
d. Procedures for physical security and access control that are required to ensure worker and public safety;
e. Fabrication of burn pans and equipment required to load propellants into the burn pans;
f. Clearing of vegetation, any needed surface improvements, and any required construction;
g. Establishment and siting of an operating building for the crew's use during burning operations;

h. Type of firefighting equipment needed on site, and coordination with local medical and local departments for contingency support;
i. Tools, material handling equipment, and personal protective equipment (PPE) required for the conduct of operations;
j. Electrical support, including grounding systems, required for safe operations;
k. Federal, state, or local regulatory requirements that may apply to closure of the burning grounds after these operations are complete;
l. Air monitoring and waste sampling activities to be conducted during the burning/detonation/disposal activity, including a description of the equipment, monitoring and sampling techniques and methods, and the frequency of monitoring and sampling;
m. Staffing requirements and limitations;
n. Travel/mobilization costs and requirements;
o. Necessary equipment as well as availability/limitations of necessary equipment required and available materials;
p. Duration for each phase (if applicable), and timeline/schedule;
q. Limitations concerning the volume to be disposed of shall be accounted for when calculating the time required for disposal, recycling, or reusing the total volume of materials. Potential limitations include:
(i) Minimum safe distance limitations on the maximum volume of material that can be disposed of at one time;
(ii) Limitations due to the maximum volume of material that can be disposed of each day, due to maintenance of the disposal areas or other reasons;
(iii) Permit and/or capacity requirements/limitations for volume and/or location of disposal; and
(iv) Provide any other limitations, qualifications, assumptions that impact the implementation of the proposed work plan.
r. Availability of licensed and experienced personnel that will be available to perform the disposal and other on-site activities;
s. Milestones to be used to measure progress for the work performed (i.e., date to initiate action, date to complete the removal/disposal of 25%, 50%, 75% of the material, completion date for the removal of all materials); and
t. The proposed Work Plan shall reflect compliance with State and Federal statutory and regulatory requirements. The Plan will describe the process for ensuring compliance with State and Federal statutory and regulatory requirements.

75. If the M6 Propellant Work Plan includes one or more option set forth in Paragraph 73 above, each open shall address, at a minimum, the relevant requirements set forth in Paragraph 74 above.

76. EPA shall select the remedy and the Respondent shall implement this remedy as set forth in the M6 Propellant Work Plan as approved or modified by EPA, in accordance with Section IX – EPA Approval of Plans and Other Submissions, of this UAO.

**B. Spill Prevention and Emergency Response Contingency Plan**

77. Within thirty (30) days of the effective date of this UAO, the Respondent shall submit to EPA for approval, with a copy to LDEQ and LMD, a Spill Prevention and Emergency Response Contingency Plan. This Plan shall include, but is not limited to, the following:

a. Response to spills or releases at and/or from the Site to address exposures/potential exposures to both the workers on-site and the public;
b. Response analysis for conceivable occurrences (i.e., who and what will respond, alternative communication methods);
c. Response notification list;
d. Coordination mechanism with State and local authorities; and
e. Involvement with local emergency planning and response agencies.

78. The Respondent shall implement this Plan as approved or modified by EPA, in accordance with Section IX – EPA Approval of Plans and Other Submissions, of this UAO.

**C. Health and Safety Plan**

79. Within thirty (30) days of the effective date of this UAO, the Respondent shall submit to EPA for review and comment, with a copy to LDEQ and LMD, a Health and Safety Plan. The purpose of this plan is to ensure the protection of the public health and safety during performance of on-site work in accordance with the M6 Propellant Work Plan. This plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration (OSHA) regulations found at 29 C.F.R. Part 1910. The plan shall also include contingency planning. The Respondent shall incorporate all relevant comments received by EPA and shall implement the Plan during the pendency of all on-site activities.

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

80. The Respondent shall utilize quality assurance, quality control, and other technical activities and chain of custody procedures for all samples consistent with "EPA Requirements for Quality Assurance Project Plans (QA/R5)" (EPA/240/B-01/003, March 2001, reissued May 2006), "Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/240/R-02/009, December 2002), and subsequent amendments to such guidelines upon notification by EPA of such amendment. Amended guidelines shall apply only to procedures conducted after such notification.

81. Prior to the commencement of any monitoring project in accordance with this Statement of Work, the Respondent shall submit to EPA for approval, with a copy to LDEQ and LMD, a Quality Assurance Project Plan ("QAPP") that is consistent with the Section VII – Work to Be Performed, and the National Contingency Plan (NCP).

82. The Respondent shall ensure that EPA and State regulator personnel and their authorized representatives are allowed access at reasonable times to all laboratories utilized for the implementation of the requirements of Section VII – Work to be Performed. In addition, the Respondent shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the QAPP for quality assurance, quality control, and technical activities that will satisfy the stated performance criteria as specified in the QAPP. The Respondent shall also ensure the laboratories used for the analysis of samples taken in accordance with this UAO perform all analyses according to accepted EPA methods. Accepted EPA methods consist of, but are not limited to, methods that are documented in the EPA's Contract Laboratory Program (http://www.epa.gov/superfund/programs/clp/), SW 846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (http://www.epa.gov/epawaste/hazard/testmethods/sw846/online/index.htm) "Standard Methods for the Examination of Water and Wastewater" http://www.standardmethods.org/), 40 C.F.R. Part 136, "Air Toxics - Monitoring Methods" (http://www.epa.gov/ttnamti1/airtox.html)," and any amendments made thereto during the course of the implementation of this UAO and any/all Plans developed pursuant to the requirements of this UAO. However, upon approval by EPA, other appropriate analytical methods may be utilized, as long as: (a) quality assurance/quality control ("QA/QC") criteria are contained in the methods and the methods are included in the QAPP; (b) the analytical methods are at least as stringent as the methods listed above; and (c) the methods have been approved for use by a nationally recognized organization responsible for verification and publication of analytical methods, e.g., EPA, ASTM, NIOSH, OSHA, etc.

83. The Respondent shall ensure all laboratories used for analysis of samples taken during actions performed in accordance with this UAO have a documented Quality System that complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), and "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001, reissued May 2006), or equivalent documentation as determined by EPA. EPA may consider Environmental Response Laboratory Network ("ERLN") laboratories, laboratories accredited under the National Environmental Laboratory Accreditation Program ("NELAP"), or laboratories that meet International Standardization Organization (ISO 17025) standards or other nationally recognized programs (http://www.epa.gov/fem/accredit.htm) as meeting the Quality System requirements. Ensure that all field methodologies utilized in collecting samples for subsequent analysis performed during the course of the implementation of this Statement of Work are conducted in accordance with the procedures set forth in the QAPP approved by EPA.

84. The Respondent shall implement this Plan as approved or modified by EPA, in accordance with Section IX – EPA Approval of Plans and Other Submissions, of this UAO.

**E . Community Relations Plan**

85. Within thirty (30) days of the effective date of this UAO, the Respondent shall prepare a community relations plan for EPA review and comment, with a copy to LDEQ and LMD, for the dissemination of information to the public regarding activities related to the M6 Propellant Work Plan. The Respondent shall incorporate all relevant comments received by EPA and shall implement the Plan during the pendency of all on-site activities.

**F. Reporting**

86. The Respondent shall submit a monthly progress report to EPA, with a copy to LDEQ and LMD, concerning the actions listed in this UAO on the 10th day of each month, beginning the first full month after EPA's approval of the M6 Propellant Work Plan until termination of this UAO. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

**G. Final Report**

87. Within thirty (30) days after completion of all work described in Section VII – Work to Be Performed, the Respondent shall submit to EPA for review, with a copy to LDEQ and LMD, a final report summarizing the actions taken to complete the requirements described within this UAO. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports," and EPA Guidance (i.e., Superfund Removal Procedures: Removal Response Reporting – POLREPS and OSC Reports" - OSWER Directive No. 9360.3-03, June 1994). The final report shall include a good faith estimate of total costs or a statement of actual costs incurred, a listing of quantities and types of materials removed off-site or handled on-site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action (e.g., manifests, invoices, bills, contracts, and permits).

**H. Miscellaneous Provisions**

88. "Day" or "day" shall mean a calendar day. In computing any period of time under this UAO where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next working date.

89. The Respondent shall submit three (3) copies of all plans, reports, or other deliverables required by this UAO for any approved work plan. Upon request by EPA, the Respondent shall submit such documents in electronic form.

## VIII. DESIGNATION OF PROJECT MANAGERS AND CONTRACTOR(S)

90. Within ten (10) days after the effective date of this UAO, the Respondent shall designate a Project Manager who shall be responsible for administration of all actions by the Respondent required by this UAO. The Respondent shall include the designated Project Manager's name, address, telephone number, and qualifications. To the greatest extent possible, the Project Manager shall be present on Site or readily available during Site work. EPA retains the right to disapprove of the designated Project Manager. If EPA disapproves of the designated Project Manager, the Respondent(s) shall retain a different Project Manager and shall notify EPA of that person's name, address, telephone number, and qualifications within seven (7) days following EPA's disapproval. Receipt by the Respondent's Project Manager of any notice or communication from EPA relating to this UAO shall constitute receipt by the Respondent.

91. The Respondent shall retain one or more contractors to perform the Work and shall notify EPA of the names and qualifications of such contractors within ten (10) days after the effective date of this UAO. The Respondent shall also notify EPA of the names and qualifications of any other contractors or subcontractors retained to perform the Work at least seven (7) days prior to commencement of such Work. EPA retains the right to disapprove of any or all of the contractors and/or subcontractors retained by the Respondent. If EPA disapproves of a selected contractor, the Respondent shall retain a different contractor and shall notify EPA of that contractor's name and qualifications within seven (7) days after EPA's disapproval. The proposed contractor must demonstrate compliance with ANSI/ASQC E-4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor's Quality Management Plan (QMP). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B0-1/002), or equivalent documentation as required by EPA.

92. EPA has designated Charles (Chuck) Barnes of the U.S. EPA Region 6 Hazardous Waste Enforcement Branch as its Project Manager. EPA and the Respondent shall have the right, subject to Paragraph 90, to change their respective designated Project Manager. The Respondent shall notify EPA seven (7) days before such a change is made. The initial notification by the Respondent may be made orally, but shall be promptly followed by a written notice.

## IX. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

93. All plans, reports and other deliverables shall be submitted by the Respondent for EPA's review and/or approval in accordance with this UAO. If requested by EPA, the Respondent shall submit in electronic form all portions of any report or other deliverable that the Respondent is required to submit pursuant to provisions of this UAO. After review of any plan, report, or other item that is required to be submitted by the Respondent for approval pursuant to this UAO, EPA shall notify the Respondent that it: (a) approves the submission; (b) approves the submission with specified conditions;

(c) will modify the submission to cure the deficiencies and provide it to the Respondent for implementation; (d) disapproves, in whole or in part, the submission, directing that the Respondent modify the submission; or (e) any combination of the above.

94. In the event of approval, or approval upon conditions, the Respondent shall proceed to take any action required by the plan, report or other item, as approved by EPA. Following EPA approval of a submittal or portion thereof, the Respondent shall not thereafter alter or amend such submittal or portion thereof unless directed by EPA.

95. Upon receipt of a notice of disapproval, the Respondent shall, within fourteen (14) calendar days (or such other time as specified by EPA in this UAO or in such notice), correct the deficiencies and resubmit the plan, report, or other item for approval.

96. Notwithstanding the receipt of a notice of disapproval, the Respondent shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA.

97. If EPA disapproves a resubmitted plan, report or other item, or portions thereof, EPA may again direct the Respondent to correct the deficiencies. Consistent with Paragraph 93 above, EPA shall also retain the right to modify or develop the plan, report or other item, and the Respondent shall implement any such plan, report, or item as corrected, modified or developed by EPA.

98. If upon resubmission a plan, report, or item is disapproved or modified by EPA because of a material defect, the Respondent shall be deemed to have failed to submit such plan, report, or item timely and EPA may deem any such failure a violation of this UAO. The Respondent's failure to incorporate EPA's comments may be considered a violation of this UAO.

99. All plans, reports, and other items submitted to EPA under this UAO shall, upon approval or modification by EPA, be incorporated into and enforceable under this UAO. In the event EPA approves or modifies a portion of a plan, report, or other item submitted to EPA under this UAO, the approved or modified portion shall be incorporated into and enforceable under this UAO.

100. Neither the failure of EPA to expressly approve or disapprove of the Respondent's submissions within a specified time period, nor the absence of comments, shall be construed as approval by EPA. Whether or not EPA gives express approval for the Respondent's deliverables, the Respondent is responsible for preparing deliverables acceptable to EPA.

## X. MODIFICATION OF WORK PLANS

101. If at any time during the implementation of the Work required under this UAO, the Respondent identifies a need for a compliance date modification or revision of a work plan, a memorandum documenting the need for the modification shall be submitted to the

EPA Project Manager. EPA in its discretion will determine if the modification is warranted and will provide written approval. Any approved compliance date or work plan modification shall be incorporated by reference into this UAO.

102. Imminent and Substantial Endangerment: In the event of conditions posing an imminent and substantial endangerment to human health or the environment, the Respondent shall notify EPA, LDEQ, and LMD within twenty-four (24) hours of the discovery of such conditions. In the event of unanticipated or changed circumstances at the Site of which the Respondent becomes aware, the Respondent shall notify the EPA Project Manager by telephone within twenty-four (24) hours of discovery of the unanticipated or changed circumstances. The Respondent shall thereafter submit to EPA for approval, within five (5) days, a plan to mitigate this endangerment. EPA will approve or modify this plan, and the Respondent shall implement this plan as approved or modified by EPA.

103. If EPA determines that activities undertaken by the Respondent pursuant to this UAO, whether in compliance or non-compliance with the UAO, have caused or may cause a release of a solid or hazardous waste, or may pose an imminent and substantial endangerment to human health and/or the environment, EPA may direct the Respondent in writing to stop further implementation of this UAO, or a portion of this UAO, for such period of time as may be necessary to abate any such release or endangerment and/or undertake any action which EPA determines to be necessary.

## XI. QUALITY ASSURANCE, SAMPLING, AND ACCESS TO INFORMATION

104. The Respondent shall assure that Work performed, samples taken and analyses conducted conform to the requirements of this UAO, EPA-approved Work Plans, approved QAPPs, and guidance identified therein. The Respondent will assure that field personnel used by the Respondent are properly trained in the use of field equipment and in chain of custody procedures. The Respondent shall only use laboratories which have a documented quality system that complies with the "Uniform Federal Policy for Quality Assurance Project Plans" (March 2005), "EPA Requirements for Quality Management Plans for Environmental Data Operations (QA/R-5)" (EPA/240/B-01/003, March 2001) or equivalent documentation as determined by EPA.

105. All results of sampling, tests, modeling or other data (including raw data) generated by the Respondent, or on Respondent's behalf, during the period that this UAO is effective, shall be submitted to EPA.

106. The Respondent shall verbally notify EPA at least fourteen (14) days prior to conducting field events as described in this UAO or in an EPA-approved Work Plan or any other approved sampling and analysis plan, unless EPA agrees in writing to a different period. At EPA's verbal or written request, or the request of EPA's oversight personnel or contractor, the Respondent shall allow split or duplicate samples to be taken by EPA (and its authorized representatives) of any samples collected in implementing this UAO.

107. All sampling and analyses conducted shall be in accordance with the applicable quality assurance, quality control, sampling, analysis, and chain-of-custody procedures specified in the "Uniform Federal Policy for Quality Assurance Project Plans" (March 2005), and in EPA document SW-846 – "Test Methods for the Chemical and Physical Analysis of Solid Waste", third edition, as amended. Any deviations from these procedures must be justified, and a demonstration must be provided of the effectiveness, applicability, and necessity of the proposed alternative. EPA must approve the use of any such alternative(s) prior to its implementation by the Respondent.

108. The Respondent shall inform the EPA Project Manager in advance which laboratories will be used by the Respondent and ensure that EPA personnel and EPA authorized representatives have access to the laboratories and personnel performing any analyses. In the event that EPA or its representatives cannot satisfactorily obtain access to the laboratories for any reason for the purposes of auditing protocols and technical proficiency, EPA shall so inform the Respondent and the Respondent shall, within five (5) days thereafter, substitute another certified laboratory which provides access in a manner deemed satisfactory to EPA.

## XII. PUBLIC ACCESS TO THE ADMINISTRATIVE RECORD

109. The Administrative Record supporting the issuance of this UAO and any written decisions or determinations made by EPA pursuant to this UAO will be available for public review by contacting the EPA Project Manager, Charles (Chuck) Barnes, at:

U.S. EPA - Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733
(214) 665-6535
barnes.chuck@epa.gov

## XIII. ACCESS

110. The work required to be performed by this UAO is located on Camp Minden, which is owned by the State of Louisiana and controlled by the LMD. Within thirty (30) days after the effective date of this UAO, the Respondent shall use its best efforts to obtain "Site Access Agreements" to perform such work required under this UAO. Any such access agreement shall provide for reasonable access by EPA and LDEQ. In the event that Site Access Agreements are not obtained within the thirty (30) day period, the Respondent shall notify EPA, in writing, documenting its best efforts to obtain such agreements.

111. If the work required to be performed by this UAO must be performed on property other than Camp Minden, the Respondent shall use its best efforts to obtain "Site Access Agreements" to perform such work within thirty (30) days of the date the Respondent becomes aware or should be aware of the need to perform such work. Any such access agreement shall provide for reasonable access by EPA, LDEQ, and LMD. In the event

that Site Access Agreements are not obtained within the thirty (30) day period, the Respondent shall notify EPA, in writing, documenting its best efforts to obtain such agreements.

112. Best efforts, as used in Section XIII, shall include, at a minimum: a certified letter from the Respondent to the present owner of such property requesting permission to allow the Respondent, EPA, LDEQ, and the LMD, and any of their authorized representative(s) access to such property; and the property owner's response, if any.

113. If, after using its best efforts as provided above, the Respondent has failed to obtain voluntary access, the Respondent shall utilize its authority to issue an administrative order providing for such access as may be required or shall refer the access issue to the Department of Justice. Such referral shall request a judicial order providing for such access as may be required, including seeking access on behalf of EPA and its designated representatives. EPA may assist in obtaining access as appropriate.

114. Consistent with Paragraphs 110 - 111 above, the Respondent shall permit EPA, LDEQ, and LMD representatives, authorized designees, employees, agents, contractors, subcontractors, or consultants to enter and freely move about the Explo Site until this UAO is terminated for the following purpose(s):

a. Interviewing Site personnel, contractors (including subcontractors and independent contractors), or any other entity or individual responsible for implementing any aspect or portion of this UAO;
b. Inspecting records, operating logs, and contracts relating to this UAO;
c. Conducting sampling, monitoring, or any other such activity which EPA or the Project Manager deems necessary; using a camera, sound recording, video or any other documentary type equipment;
d. Monitoring the work;
e. Assessing the Respondent's compliance with the UAO; and
f. Verifying the reports and data submitted to EPA by the Respondent.

115. The Respondent shall make available to EPA for inspection, copying, or photographing, all records, files, photographs, documents, or any other writing, including monitoring and sampling data that pertain to any work undertaken pursuant to this UAO. The Respondent shall also make available to EPA, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

116. Nothing in this UAO shall be construed to limit or otherwise affect EPA's right of access and entry pursuant to any applicable laws and regulations, including RCRA and CERCLA.

117. Nothing in this UAO shall be construed to limit or otherwise affect the Respondent's liabilities and obligations to perform the directed actions, including actions beyond the Facility boundary, notwithstanding the lack of access. EPA may determine that

additional on-site measures must be taken to address releases beyond the Facility boundary if access to off-site areas cannot be obtained.

## XIV. NOTICES

118. For purposes of this UAO, all written communications, notices or submissions required by this UAO shall be directed to a person specified by each party. EPA has designated the following person as EPA's Project Manager:

Charles (Chuck) Barnes
Compliance Enforcement Section (6EN-HE)
Hazardous Waste Enforcement Branch
U.S. EPA – Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733
(214) 665-6535
barnes.chuck@epa.gov

Additionally, copies of all such correspondence shall be sent to the following addressees:

Louisiana Military Department

Colonel Ronnie Stuckey
100 Louisiana Boulevard
Minden, Louisiana 71005-7908
318-382-4183
ronnie.stuckey@us.army.mil

Louisiana Department of Environmental Quality

Karen Price
Louisiana Department of Environmental Quality
P.O. Box 4312
Baton Rouge, Louisiana 70821
225-219-3612
karen.price@la.gov

119. Within ten (10) calendar days after the effective date of this UAO, the Respondent shall designate a person to receive such written communications, notices, or responses to submissions required by this UAO and shall provide a phone number, mailing address, and e-mail address for such person.

120. Any notice, report, certification, data presentation, or other document submitted by the Respondent pursuant to this UAO shall be certified by a duly authorized representative of the Respondent. A person is a "duly authorized representative" only if: (1) the authorization is made in writing; (2) the authorization specifies either an individual or

position having responsibility for overall operation of the activity (a duly authorized representative may thus be either a named individual or any individual occupying a named position); and (3) the written authorization is submitted to the Project Manager designated by EPA, in accordance with Section VIII of this UAO. The certification required by this Paragraph shall be in the following form:

> I certify that the information contained in or accompanying this (type of submission) is true, accurate, and complete.
>
> As to (the/those identified portion(s)) of this (type of submission) for which I cannot personally verify (its/their) accuracy, I certify under penalty of law that this (type of submission) and all attachments were prepared in accordance with procedures designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, or the immediate supervisors of such person(s), the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.
>
> Signature:
>
> Name:
>
> Title:

## XV. FORCE MAJEURE AND EXCUSABLE DELAY

121. The Respondent shall perform all the requirements of this UAO within the time limits set forth, approved, or established herein, unless the performance is prevented or delayed solely by events which constitute a force majeure. A force majeure is defined as any event arising from causes not reasonably foreseeable and beyond the control of the Respondent which could not be overcome by due diligence and which delays or prevents performance by a date required by this UAO. Such events do not include unanticipated or increased costs of performance, changed economic circumstances, normal precipitation events, or failure to obtain federal, state, or local permits.

122. The Respondent shall provide notice orally or by e-mail to the EPA Project Manager as soon as possible, but not later than 72 hours after the time the Respondent first become aware of any event which it knows or should know constitutes a force majeure event. The Respondent shall also provide written notice to the EPA Project Manager within five (5) days after which it first becomes aware of any event that it knows or should know constitutes a force majeure event. Such notice shall detail why the Respondent believes the event constitutes a force majeure event, the estimated length of delay associated with

the event, including necessary demobilization and remobilization, its causes, the measures taken or to be taken to minimize the delay, and an estimated timetable for implementation of these measures. The Respondent must adopt all reasonable measures to avoid and minimize the delay. Failure to comply with the notice provision of this section shall constitute a waiver of the Respondent's right to assert that a force majeure event exists and may be grounds for EPA to deny the Respondent an extension of time for performance.

123. After receiving such notice from the Respondent that the Respondent is invoking the force majeure provisions of this UAO, EPA shall respond in writing indicating either EPA's agreement that the event constitutes a force majeure or its disagreement and the reasons therefore.

124. If the EPA determines that a force majeure has occurred, the time for performance may be extended, upon EPA approval, for a period equal to the delay resulting from such circumstances. This shall be accomplished through written amendment to this UAO or, if deemed sufficient by EPA, through written amendment to a previously approved work plan. Such an extension does not alter the schedule for performance or completion of any other tasks required by this UAO unless the schedules for those tasks or actions are expressly extended by EPA.

## XVI. RESERVATION OF RIGHTS

125. EPA expressly reserves, without limitation, all of its statutory and regulatory powers, authorities, rights, remedies and defenses, both legal and equitable, which it may have. EPA may also exercise its authority under CERCLA to undertake removal or remedial actions.

126. EPA expressly reserves all rights that it may have, including the right to disapprove of work performed by the Respondent pursuant to this UAO, to require the Respondent to correct any work disapproved by EPA, and to direct the Respondent to perform tasks in addition to those required pursuant to this UAO.

127. This UAO shall not be construed as a covenant not to sue, or as a release, waiver, or limitation of any claims, rights, remedies, defenses, powers and/or authorities which EPA has under RCRA, CERCLA, or any other statutory, regulatory or common law authority of the United States.

128. This UAO shall not limit or otherwise preclude EPA from taking any additional legal action against the Respondent should EPA determine that any such additional legal action is necessary or warranted.

129. Notwithstanding compliance with this UAO, the Respondent is not released from any claims EPA may have for costs, and EPA reserves the right to seek reimbursement from the Respondent for any such costs it incurs. Compliance with this UAO shall not relieve

the Respondent of its obligations to comply with RCRA or any other applicable local, state, or federal laws and regulations.

130. EPA reserves the right to seek to perform any portion of the work required herein or to take any additional response actions EPA deems necessary to protect health or welfare or the environment.

## XVII. OTHER APPLICABLE LAWS

131. The Respondent shall undertake all actions required by this UAO in accordance with the requirements of all applicable local, state, and federal laws and regulations. The Respondent shall obtain all required permits or approvals as necessary to perform the work required by this UAO.

132. Any reports, plans, specifications, schedules, or other submissions and attachments required by this UAO are upon written approval by EPA incorporated into this UAO. Any noncompliance with such EPA-approved reports, plans, specifications, schedules, and attachments shall be considered a violation of this UAO.

133. No informal advice, guidance, suggestions, or comments by EPA regarding reports, plans, specifications, schedules, and any other writing submitted by the Respondent shall be construed as relieving the Respondent of its obligation to obtain written approval, if and when required by this UAO.

## XVIII. RECORD RETENTION

134. The Respondent shall preserve for a minimum of five (5) years after termination of this UAO all data, records and documentation in its possession or in the possession of its divisions, officers, supervisors, employees, agents, contractors, successors, and assigns which relate in any way to this UAO or to solid and/or hazardous waste management or disposal at Camp Minden. The Respondent shall make such records available to EPA at its request. The Respondent shall also maintain records pertaining to the work being performed pursuant to this UAO and shall make such records available to EPA for inspection upon request.

## XIX. ADDITIONAL WORK

135. EPA may determine or the Respondent may propose that certain tasks are necessary in addition to or in lieu of the tasks included in this UAO when such additional work is necessary to meet the purposes set forth in Section I (Introduction). EPA may determine that the Respondent shall perform the additional work and EPA will specify, in writing, the basis for its determination that the additional work is necessary. Within five (5) days after the receipt of such determination, the Respondent shall have the opportunity to meet or confer with EPA to discuss the additional work. The Respondent shall submit for EPA approval a work plan for the additional work. Such work plan shall be submitted within five (5) days of receipt of EPA's determination that additional work is necessary, or

according to an alternative schedule established by EPA. Upon approval of a work plan, the Respondent shall implement it in accordance with the schedule and provisions contained therein. The work plan for any additional work shall be incorporated by reference into this UAO.

## XX. ENFORCEMENT

136. The failure of the Respondent to comply with any provision of this UAO may be considered a violation of this UAO.

137. In the event of any action filed under Section 7002(a) of RCRA, 42 U.S.C. § 6972(a) alleging any violation of this UAO, it shall be presumed that this UAO, including those provisions which address record keeping, reporting and schedules of compliance, are requirements, standards, and conditions, and are thus enforceable under Section 7002(a) of RCRA.

138. Nothing herein shall preclude EPA from taking any additional enforcement actions, and/or such other actions as it may deem necessary for the abatement or prevention of an imminent danger to public health or the environment arising from conditions at the Site. Nor shall EPA be precluded from taking any such other enforcement actions as EPA may deem necessary based on additional information or under other environmental laws.

## XXI. TERMINATION

139. This UAO and all of its terms and provisions shall remain in effect until all of the activities called for by this UAO are completed and the Respondent is so notified in writing by EPA. Such notice shall be signed by the Director, Compliance Assurance and Enforcement Division, EPA Region 6. The Respondent may request that EPA Region 6 provide the Respondent with such notice, and shall supply EPA with such information, including certifications, as EPA may specify. Such notice shall not, however, terminate the Respondent's obligation to comply with any continuing obligations under this UAO.

## XXII. GENERAL PROVISIONS

140. Nothing in this UAO constitutes a satisfaction or release from liability with respect to any conditions or claims arising as a result of past, current or future operations, ownership or use of the Site by the Respondent, its agents, officers, supervisors, directors, successors or assigns.

141. Nothing in this UAO affects any right, claim, interest, defense, or cause of action of EPA with respect to the Respondent or any third parties.

## XXIII. NOTICE OF NON-LIABILITY OF EPA

142. EPA shall not be deemed a party to any contract involving the Respondent and relating to activities at Camp Minden, and EPA shall not be liable for any claim or cause of action

arising from or on account of any act, or the omission of the Respondent, its officers, employees, contractors, receivers, trustees, agents or assigns, in carrying out the activities required by this UAO.

## XXIV. NOTICE OF INTENT TO COMPLY

143. The Respondent shall notify EPA's Project Manager in writing of whether it intends to comply with this UAO by no later than five (5) days after the effective date of this UAO. The Respondent shall be deemed in violation of this UAO if it fails to provide written notification to EPA's Project Manager of the Respondent's intent to comply within the time period noted above.

## XXV. ANTI-DEFICIENCY ACT

144. Nothing set forth in this UAO shall require the Respondent to violate the Anti-Deficiency Act, 31 U.S.C. § 1341 *et seq.*

## XXVI. OPPORTUNITY TO CONFER

145. Within ten (10) calendar days of the Respondent's receipt of this UAO, if the Assistant Secretary of the Army wishes to confer with the EPA Assistant Administrator for the Office of Enforcement and Compliance Assurance (EPA Assistant Administrator), either through an exchange of letters or through a direct meeting, the Assistant Secretary of the Army must file a written request addressed to the EPA Assistant Administrator seeking an opportunity to confer with the EPA Assistant Administrator. The request should be served on the EPA Assistant Administrator, with a copy to the Director of EPA's Federal Facilities Enforcement Office, the Regional Counsel for EPA Region 6, and the EPA Region 6 staff attorney. The letter requesting the conference should specifically identify those issues which the Respondent wishes the EPA Assistant Administrator to consider.

146. If the Assistant Secretary of the Army wishes to confer with the EPA Assistant Administrator through a direct meeting, the request for a conference should also specifically identify the issue(s) that the Army proposes to discuss with the EPA Assistant Administrator, as well as the person(s) who will represent the Respondent. In addition, as part of its request for a conference either through an exchange of letters or a direct meeting, the Assistant Secretary of the Army should attach copies of all necessary information regarding the issue(s). Failure to request a conference within the ten (10) calendar day period will be deemed a waiver of the right to confer with the EPA Assistant Administrator.

147. If the conference is to be conducted through a direct meeting, representatives of Respondent and EPA other than the Assistant Secretary of the Army and the EPA Assistant Administrator may request to be present during the conference. This request to attend the conference should likewise be in writing and served on the Director, EPA's Federal Facilities Enforcement Office, EPA's Regional Counsel, EPA Region 6 staff attorney, and Respondent's counsel. After a determination is made that a direct

conference will occur, the EPA Assistant Administrator will notify the Assistant Secretary of the Army, the Regional Counsel, the EPA Region 6 staff attorney, and Respondent's counsel.

148. After the conference, the EPA Assistant Administrator will issue a written decision with appropriate instruction regarding the finality of this UAO. This decision shall be made part of the administrative record and shall be effective within five (5) calendar days of receipt of the Assistant Administrator's decision.

## XXVII. EFFECTIVE DATE

149. This UAO shall become effective within eleven (11) calendar days of Respondent's receipt of this UAO unless a conference is requested with the EPA Assistant Administrator in the time and manner provided in Section XXVI above. If a conference with the EPA Assistant Administrator is requested in the time and manner provided in Section XXVI above, this UAO shall become effective within five (5) calendar days of Respondent's receipt of the EPA Assistant Administrator's decision.

**IT IS SO ORDERED:**

John Blevins, Director
Compliance Assurance and Enforcement Division
U.S. Environmental Protection Agency
Region 6
Dallas, Texas 75202-2733

3·18·14
Date