ENVIRONMENTAL CHEMICAL CORPORATION

CLOSURE REPORT

CHARACTERIZATION OF SPENT SHELL CASINGS TWENTY-NINE PALMS, CA

Contract No. DACW05-95-D-0014
Delivery Order No. 0014

Prepared for:

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U.S. Army Corps of Engineers
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March 23, 1999

Environmental Chemical Corporation
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Burlingame, CA 94010

TABLE OF CONTENTS

TABLES

APPENDICES

1.0 INTRODUCTION

Environmental Chemical Corporation (ECC) presents this Closure Report for the "Characterization of Spent Shell Casings" at the Marine Corps Air Ground Combat Center (MCAGCC) at Twenty-Nine Palms, California. All activities for this Delivery Order were carried out in compliance with federal and state regulations and the specifications provided by the U.S. Army Corps of Engineers (USACE). ECC followed applicable guidelines in USACE EM 385-1-1 and OSHA 29 CFR 1910.132 for sampling and analysis operations.

2.0 SITE HISTORY

2.1 Site Location

The project site is located at the Marine Corps Air Ground Combat Center (MCAGCC), Twenty-nine Palms, California. The site is approximately 90 miles northeast of Riverside, California on Highway 62.

2.2 Site Conditions

Samples for a total of 31 items were to be tested and characterized. The filler materials to be analyzed were to be encountered at ranges at the Twenty-nine Palms Marine base. The range selection was coordinated between USACE, Range Management, Range Scheduling, MCAGCC EOD, and NREA. ECC coordinated all work procedures with the USACE COR and MCAGCC.

3.0 SCOPE OF THE PROJECT

ECC collected representative samples of residue from spent shell casings and ordnance fragments incorporating various types of filler materials. Test ordnance items were supplied by the USMC NREA Directorate. ECC analyzed thirty one ordnance items as directed by the USACE. Analysis was performed for HTRW characteristics, including Ignitability, Corrosivity, Reactivity and Toxicity which included TCLP, TTLC, and STLC. A comprehensive list of filler materials from which the various types of ordnance were selected, was provided to ECC. ECC has already submitted all plans, analytical data, and reports as required by the project specifications. ECC carried out site activities in accordance with USACE guidelines. Please see Appendix A for the U.S. Army Engineering Safety Concepts and Basic Consideration for Unexploded Ordnance (UXO) Operations, that was adhered to during the performance of work.

4.0 SCHEDULE AND SEQUENCE OF OPERATIONS

Please refer to the Gantt chart in Appendix B for the sequence of operations and the duration of the job. The chart lists the various tasks that ECC performed on site for sample collection and subsequent analysis.

A survey of prevailing site conditions was made by ECC's Senior UXO Supervisor(SUXOS)/ Site Safety and Health Officer (SSHO) and Quality Control manager(QCM) before commencing any operations, to determine hazards and the type and number of safeguards to be installed. The survey included safe access and movement within work areas and access routes; accessability of vehicles; safety requirements and; personal protective equipment (PPE) requirements.

All activities were accomplished within an active impact range. No structures or utilities were affected. All ECC personnel were familiar with the safety precautions, procedures, and equipment required for controlling the potential hazards associated with this work. ECC had an Emergency Response Plan which was highlighted in the Site Safety and Health Plan (SSHP).

The tasks described in the following sections present the sequence of operations that was followed:

- Submission of project work plans by ECC
- Review of project plans by USACE
- Corrections/ amendments and resubmission of plans by ECC
- Mobilization on site
- Site UXO Clearance and setup (by USMC EOD personnel)
- Preparation for sampling activities
- Sampling
- Site clean-up
- Sample cutting according to laboratory guidelines
- Packaging/ shipping of samples
- Demobilization
- Submission of Draft Ordnance Residue Characterization Report

All explosive operations required for the set-up and detonation/function of test ordnance were accomplished by the government. ECC's UXO personnel assisted in these operations whenever requested by the government.

Decontamination procedures were followed as explained in ECC's Sampling and Analysis Plan (SAP) that was submitted to the government prior to start of site work.

5.0 RESULTS

Copies of all tests results have been provided to the Contracting Officer, in accordance with the SAP and requirements of the scope of work, as part of ECC's Sample Characterization Report. Please see tables in Appendix C for a summary of results.

6.0 SAMPLING/ TESTING PROCEDURE

ECC collected representative samples of fragment from 31 ordnance types detonated/ functioned at the 29 Palms Site. Samples were sent to the designated laboratory, Quanterra, for completion of the analytical parameters required by USACE. These parameters are outlined in Table 6.1. ECC coordinated all sampling efforts with the COR and MCAGCC Environmental staff during the entire sampling phase.

6.1 Required Equipment, Containers, and Supplies

ECC used the following equipment during sample collection activities:

- Disposable latex gloves
- Stainless steel spoon
- Stainless steel bowl
- Distilled water for decontamination
- Non-phosphate surfactant for decontamination
- Isopropyl alcohol for decontamination
- Scrub brush for decontamination
- Glass amber bottles (250 ml) with Teflon sealed caps
- Plastic sample bottles (250 ml)
- Coolers and thermometer
- Blue ice for sample preservation
- Plastic sealable bags
- Sample labels and shipping documents
- Bubble wrap
- Pliers
- Cutting shears
- Hack saw
- Digital scale
- Work table and vice grip

6.1 Sampling Overview

All site activities were recorded on CQC reports. Actual results have been submitted to the USACE. Information regarding material tests or analytical procedures used, actual results and statement of conformity or nonconformity, signature of the testing laboratory representative, and any other documents pertaining to the result has been included in ECC's analytical report submitted to the USACE.

An overview of the sampling tasks is given below.

- Establishment of decontamination area at each sampling site;
- Collection of sample;
- Management of sample size (when necessary);
- Weighing and packaging of sample;
- Preservation and storage of sample;
- Sample Labeling;
- Decontamination of sample collection equipment;
- Shipment of samples to designated laboratory.

All samples collected were preserved according to EPA and/or USACE protocols. Table 6.2 describes all analytical requirements and corresponding preservation data. This information was also recorded on the sample documents and in the ECC Field Sampling Logbook.

All samples were double bagged, taped shut, and placed in the corresponding ice chest. Bubble wrap was used as packing material to secure the sample containers while being transported to the designated laboratory. Chain of Custody (COC) forms were attached to the sample transport container. Plastic bags containing ice or blue ice were placed inside the ice chest holding rinsate samples to sustain the required 4 degree Celsius temperature. Custody seals were fixed on each cooler. Chain of Custody and Analytical Request forms accompanied each cooler as well.

6.2 Management of Sample Size

All samples were at least 500 grams in mass. The maximum particle size usable by the designated laboratory was required to be 4 square inches. A 100 gram portion of this sample was to be no larger that 5/8 square inches. In consideration of this requirement and that many of the ordnance items were of significant size, ECC was required to cut some of the samples prior to shipment. Effort was made to limit the amount of sample handling. Tools that enabled minimal contact were used whenever possible.

In sampling and testing procedures, the laboratory ensured that:

- Testing procedures complied with contract requirements;
- Testing equipment and facilities were available and complied with testing standards;
- Test instruments were calibrated against certified standards;
- Recording forms were prepared;

The following information for analytical tests was recorded and maintained in the project files:

- Test Number
- Name of person who sampled and tested
- Date and Time of Tests
- Conditions of Tests
- Type of Matrix
- CQC Initials

6.3 Analytical Parameters

Following tables list the analytical parameters and requirements for this delivery order.

Table 6.1

Analytical Parameter Requirements

EPA Test Methods	Test Name
9045	Corrosivity (pH)
9030	Reactivity (Total Sulfides)
1020	Ignitability (Flashpoint)
8330	Explosives (CDHS-TTLC)
8330	Explosives (CDHS-STLC)
8330	Explosives (TCLP)
8331	Tetrazene (CDHS-TTLC)
8331	Tetrazene (CDHS-STLC)
8331	Tetrazene (TCLP)
CADHS	96 hr Acute Toxicity Bioassay

Table 6.2

Sample Containers, Preservation, Turnaround Time

Matrix	Test Parameter	Container	Preservation[1]	Turnaround Time
Fragment Sample	All	Sealable plastic bag inside sealable plastic bag	None Required	40 Calender Days (Extensive time required for the multiple leachates.)
Rinsate Samples	9045 1020 8330 8331 CADHS	Amber glass bottle inside sealable plastic bag	None Required	40 Calender Days (Extensive time required for the multiple leachates.)

Sampling and testing was done under the technical direction of qualified persons with experience in analytical testing. The field chemist performed sampling according to protocols defined in the Scope of Work (SOW) and in the Sampling and Analysis Plan (SAP). Locations of the test sites were identified by the USMC EOD unit based on requirements of the SAP protocols.

ECC assisted the MCAGCC EOD personnel in the set-up of ordnance tests. USMC's personnel exploded the ordnances so as to provide samples to ECC. ECC was responsible for gathering the samples and subsequently analyzing them. The MCAGCC EOD personnel escorted the ECC team to all sites where samples were to be collected.

All personnel retired from the test site to a safe area where USMC EOD personnel detonated the test ordnance. After detonation/function of the test ordnance, MCAGCC personnel inspected the test site for UXO hazards and ensured an access route to the test site. After the clearance, the ECC UXO team along with ECC's field chemist performed ordnance residue sampling and collection. ECC's UXO personnel ensured that all chosen samples were explosion/hazard free prior to collection/sampling.

7.0 SITE PHOTOGRAPHS

Site activities including mobilization, ordnance detonation/ functioning, sample collection, and sample packaging are shown in the Site Photographs in Appendix D.

APPENDIX A

SAFETY CONCEPTS FOR UXO OPERATIONS

Revised February 16, 1996

U.S. Army Engineering and Support Center, Huntsville

SAFETY CONCEPTS AND BASIC CONSIDERATIONS FOR UNEXPLODED ORDNANCE (UXO) OPERATIONS

1. Introduction. There is no "safe" procedure for dealing with UXO, merely procedures which are considered least dangerous. However, maximum safety in any UXO operation can be achieved through adherence to applicable safety precautions, a planned approach and intensive supervision. Only those personnel absolutely essential to the operation shall be allowed in the restricted/exclusion area during UXO operations (DoD 6055.9-STD). Safety must become a firmly established habit when working with UXO. Safety is the leading edge of quality.

2. References. The following documents form a part of this document to the extent referenced.

ATFP 5400.7	Alcohol Tobacco and Firearms Explosives Laws and Regulations
27 CFR Part 55	Commerce in Explosives
29 CFR 1910	Occupational Safety and Health Standards
29 CFR 1926	Safety and Health Regulations for Construction
49 CFR 100-199	Transportation
DoD 6055.9-STD	DoD Ammunition and Explosives Safety Standards
DA Pam 385-64	Ammunition and Explosives Safety Standards
ETL 385-1-2	Generic Scope of Work for Ordnance Avoidance Activities
TM 9-1300-200	Ammunition General
TM 9-1300-214	Military Explosives
TM 9-1375-213-12	Operator's and Organization Maintenance Manual (Including Repair Parts and Special Tools List):

3. Definitions

a. Unexploded Ordnance (UXO). An item of ordnance which has failed to function as designed, or has been abandoned or discarded, and is still capable of functioning and causing injury to personnel or damage to material.

b. UXO Procedures. UXO procedures include but are not limited to the following actions:

(1) Gaining access to (manual excavation) and identifying subsurface anomalies, and assessing condition of buried UXO.

(2) Identifying and assessing condition of surface UXO.

(3) Recovery and final disposal of all UXO.

c. UXO Related procedures: UXO related procedures include but are not limited to the following:

(1) Location and marking of subsurface anomalies.

(2) Location and marking of suspected surface UXO.

(3) Transportation and storage of recovered UXO.

(4) Utilizing Earth Moving Machinery (EMM) to excavate soil to no closer than approximately 12 inches of a subsurface anomaly.

d. UXO Qualified Personnel: UXO qualified personnel are US citizens who have graduated from the US Army Bomb Disposal School, Aberdeen, MD, or the US Naval Explosive Ordnance Disposal (EOD) School, Indian Head, MD. Graduates of the EOD assistant Course, Redstone Arsenal, AL, or Eligin AFB, FL with more than three years combined active duty military EOD and contractor UXO experience shall also be UXO qualified.

4. General Safety Concerns.

a. UXO operations shall not be conducted until a complete plan for the operation involved is prepared and approved. Plans shall be based upon limiting exposure to a

minimum number of personnel, for a minimum time, to the minimum amount of UXO, consistent with safe and efficient operations.

b. Only UXO qualified personnel shall be involved in UXO procedures. Non-UXO qualified personnel may be utilized to perform UXO related procedures when supervised by UXO qualified personnel. All personnel engaged in operations shall be thoroughly trained in explosive safety and be capable of recognizing hazardous explosive exposures.

c. The use of electroexplosive devices (EED) susceptible to electromagnetic radiation (EMR) devices in the radio frequency (RF) range, that is, radio, radar, and television transmitters, has become almost universal.

d. Some ordnance is particularly susceptible to EMR (RF) emission.. A knowledge of ordnance that is normally unsafe in the presence of EMR (RF) is important so preventive steps can be taken if the ordnance is encountered in a suspected EMR (RF) field.

(2) The presence of antennas, communication and RADAR devices should be NOTED on initial site visits and/or preliminary assessments.

(3) When potential EMR hazards exist, the site shall be electronically surveyed for EMR/RF emissions and the appropriate actions will be taken. Minimum safe distances from EMR/RF sources are listed in Tables 2-2, 2-3, and 2-4 of TM 9-1375-213-12.

f. Do not wear outer or undergarments made of materials which have high static generating characteristics when working on UXOs. Materials of 100 percent polyester, nylon, silk, or wool are highly static-producing. Any person handling a UXO suspected of containing EEDs will ground himself/herself prior to touching the UXO. Refer to DA Pam 385-64 for more information regarding non-static producing attire.

5. UXO Safety Precautions for Site Characterization.

a. Make every effort to identify the UXO. Visually examine the item for markings and other identifying features such as shape, size, and external fittings. However, do not move the item to inspect it. If an unknown UXO is encountered, the US Army Engineering and Support Center, Huntsville (USAESCH) representative will be notified.

b. Foreign UXO were returned to the United States for exploitation and disposal. When a records search indicates the possibility of foreign UXO being on a site, appropriate safety precautions and procedures will be incorporated into UXO operation plans.

c. Any time a suspected chemical munition is encountered, all personnel will withdraw up wind from the munition. A two person UXO team, located upwind, shall secure the munition until relieved by the Technical Escort Unit (TEU) or Explosive Ordnance Disposal (EOD) personnel.

d. Ordnance items which penetrate the earth to a depth where the force of the explosion is not enough to rupture the earth's surface forms an underground cavity called a camouflet. Camouflets will be filled with the end product of the explosion, carbon monoxide gas. Camouflet detection and precautions must be considered if a records search indicates the site was used as an impact area.

e. Avoid inhalation of, and skin contact with, smoke, fumes, and vapors of explosives and related hazardous materials.

f. Consider UXO which has been exposed to fire and detonation as extremely hazardous. Chemical and physical changes may have occurred to the contents which render it much more sensitive than it was in its original state.

g. Do not rely on the color coding of UXO for positive identification of contents. Munitions having incomplete, or improper color coding have been encountered.

h. Avoid the area forward of the nose of a munition until it can be ascertained the item does not contain a shaped charge. The explosive jet can be fatal at great distances forward of the longitudinal axis of the item. Assume any shaped charge munitions to contain a piezoelectric (PZ) fuzing system until the fuzing system is positively identified. A PZ fuze is extremely sensitive, can function at the slightest physical change, and may remain hazardous for an indefinite period of time.

i. Examine a projectile for the presence or absence of an unfired tracer. Also examine the item for the presence or absence of a rotating band and it's condition.

j. Approach an unfired rocket motor from the side. Ignition will create a missile hazard and hot exhaust.

(1) Do not expose rocket motors to any EMR source.

(2) If an unfired rocket motor must be transported, it shall be positioned in the direction which offers the least exposure to personnel in the event of an accidental ignition.

k. Consider an emplaced landmine armed until proven otherwise. It may not be

possible to tell, or it may be intentionally rigged to deceive.

(1) Many training mines contain firing indicator charges capable of inflicting serious injury.

(2) Exercise care with wooden mines that have been buried for a long time. Because of soil conditions, the wood deteriorates and the slightest inadvertent pressure/movement may initiate the fuze.

l. Assume a practice UXO contains a live charge until it can be determined otherwise. Expended pyrotechnic/practice devices may contain red/white phosphorus residue. Due to incomplete combustion, phosphorous may be present and reignite spontaneously if subjected to friction or the crust is broken and the contents exposed to air."

m. Do not approach a smoking white phosphorus (WP) UXO. Burning WP may detonate the burster or dispersal explosive charge at any time.

n. If the positive identification of suspected explosive materials is required, procedures in Chapter 13, TM 9-1300-214, "Military Explosives" or other approved explosives analysis shall be used to identify the explosives.

6. Ordnance Avoidance for HTRW Activities.

a. Investigative activities on potential ordnance contaminated sites will be accomplished using approved ordnance avoidance procedures.

b. HTRW ordnance avoidance procedures are detailed in Engineering Technical Letter 385-1-2. This ETL is available on the Internet, or through the Quality and Technology team at USAESCH.

7. Restricted/Exclusion Area Operations.

a. On Ordnance and Explosives sites, the contractor's site safety personnel shall establish a restricted/exclusion area for each UXO team operating on the site. The purpose of the area is for the protection of the public and other personnel from the blast and fragmentation hazards of an accidental detonation. The area shall be establish based on the following minimum factors:

(1) Previous site use that caused the contamination: impact area, open burn/ open detonation, burial, etc..

(2) Project type: surface clearance, subsurface clearance, sifting operation,

sampling, etc..

(3) Known ordnance contamination, distances to public exposure, terrain, etc..

b. When multiple UXO teams are operating on a site, the restricted/exclusion area and team separation distances shall never be less than 200 feet.

c. During the time frame that UXO operations are being accomplished, only personnel necessary for the UXO operation shall be within the restricted/exclusion area. When non-essential personnel enter the restricted/exclusion area, all UXO operations will cease.

(1) Plan for, provide, and know the measures to be taken in the event of an accident.

(2) Provide a designated emergency vehicle in the area in case of an accident or other emergency.

(3) Coordination with the appropriate airspace representative shall be conducted and the appropriate notification procedures arranged.

(4) When non-essential personnel must enter the restricted/exclusion area, the following must be accomplished: a) The individual must receive a safety briefing, b) be escorted by a UXO qualified individual; and c) All UXO operations must cease within the fragmentation radius of the largest item expected to be encountered within the area.

d. Before any movement of a UXO, the fuze condition must be ascertained. If the condition is questionable, consider the fuze to be armed. The fuze is considered the most hazardous component of a UXO, regardless of type or condition.

(1) In general, a projectile containing a Base Detonating (BD) fuze is to be considered armed if the projectile has been fired.

(2) Arming wires and pop out pins on unarmed fuzes should be secured by taping in place prior to movement.

(3) Do Not dismantle or strip any UXO.

(4) Do Not depress plungers, turn vanes, or rotate spindle, levers, setting rings, or other external fittings on UXO's. Such actions may arm, actuate, or function the UXO.

(5) Do Not subject mechanical time fuzes to any unnecessary movement.

(6) Do Not remove any fuzes from UXO's.

(7) Some ordnance items do not contain any positive safety features. Positively identify and review all safety precautions prior to handling any ordnance.

e. Personnel working within the Restricted area/Exclusion zone shall comply with the following:

(1) Do not conduct operations without an approved Site Specific Safety and Health Plan and an approved Work Plan.

(2) Do not smoke, except in authorized areas.

(3) Do not have fires for heating or cooking, except in authorized areas.

(4) Do not conduct explosive operations during electrical, sand, dust, or snow storms.

(5) Explosive operations will be conducted during daylight only.

(6) During magnetometer operations, UXO teams shall not wear safety shoes or other footwear which would cause the magnetometer to present a false indication.

f. Do not undertake the handling or disposal of liquid propellant fuels or oxidizers if not familiar with the characteristics of the material.

g. Civil War projectiles shall be treated as any other UXO.

h. If records search indicated WP munitions were fired or destroyed in the area, extra care shall be taken when uncovering a buried UXO. A buried WP munition may be damaged and when exposed to air, may start burning and detonate. An ample supply of water and mud shall be immediately available if excavation reveals a WP UXO. Appropriate protective equipment (leather gloves, face shield, and flame-retardant clothing) and first aid shall also be immediately available.

8. Storage.

a. During Ordnance and Explosives projects, storage of explosives and UXO fall into two categories.

(1) On-DoD Installations.

(2) Off-DoD Installations.

9. Excavation Operations.

a. The usual method for uncovering buried UXO is to excavate by hand. Hand excavation is the most reliable method for uncovering UXO, but unless the UXO is very near the surface, hand excavation exposes more people to the hazard of detonation for a longer period of time than any other method. Hand excavation will be accomplished only by UXO qualified personnel.

b. Earth moving machinery (EMM) may be used to excavate buried UXO, if the UXO is estimated to be deeper than 12 inches. EMM shall not be used to excavate within 12 inches of an UXO. When excavation gets within approximately 12 inches of an UXO, hand excavation shall be used to uncover the UXO. EMM may be operated by non-UXO personnel, under the direct supervision of UXO personnel.

(1) If more than one EMM will be used on the same site, they will be separated by the same separation distances required for multiple teams on that site.

(2) During excavation operations, only those personnel absolutely necessary for the operation shall be within the restricted area/exclusion zone.

(3) Excavation and trenching shall comply with the provisions of 29 CFR 1926 subpart P.

10. Disposal Operations.

a. As a general rule, UXO will be detonated in place when the situation allows. All detonation-in-place operations shall be conducted by electrical means to assure maximum control of the site, except in situations where static electricity or EMR hazards are present. Non-electrical means can be used when the situation dictates.

(1) Do not allow one person to work alone in disposal operations. At least one person shall be available near the disposal site to give warning and assist in rescue activities in the event of an accident.

(2) Loose initiating explosives include lead azide, mercury fulminate, lead styphnate, and tetracene. These explosives manifest extreme sensitivity to friction, heat, and impact. Extra precautions may be required when handling these types of explosives. Keep initiating explosives in a water-wet condition at all times until ready for final preparation for detonation, the sensitivity of these explosives is greatly increased when dry.

(3) Only condition "Code A" or "Code C" explosive items shall be used as donor

b. On-DoD Installation Storage.

(1) The provisions of DoD 6055.9-STD shall be followed. Generally, an installation should have an explosive storage area that meets requirements in DoD 6055.9-STD. Permitting and compliance requirements for existing facilities are an installation responsibility. Compatibility of explosives found in Chapter 3, DoD 6055.9-STD shall be complied with. UXO awaiting disposal shall not be stored with other explosives.

(2) If an installation does not have an existing storage facility, the provisions of paragraph c. below shall apply.

c. Off-DoD Installation Storage.

(1) Generally, the contractor is responsible for construction of a temporary explosive storage area that meets all local, state, ATF requirements, and as much of DoD 6055.9-STD that is practical to implement.

(2) When establishing an explosive storage area, the following requirements must be met.

(a) The area shall, if possible, meet the inhabited building and public traffic route distances specified in DoD 6055.9-STD. If the distances are less than required by DoD 6055.9-STD, then a proposed barricading and berm plan to protect the public from accidental detonation must be submitted and approved.

(b) Magazines must meet requirements of ATF Regulations, and each magazine must have an Net Explosive Weight established for the explosives to be stored.

(c) Each magazine must have lightning protection IAW Chapter 7, DoD 6055.9-STD.

(d) Magazines must meet intramagazine distances as defined in Chapter 9, DoD 6055.9-STD.

(e) A physical security survey shall be conducted to determine if fencing or guards are required. Generally, a fence around the magazines is needed, but the contractor is responsible to determine the degree of protection required to prevent the theft of explosives and UXO.

d. A fire plan for the storage area shall be prepared and coordination with the nearby fire department shall be conducted. Placarding of magazines shall be in accordance with local, state, and federal requirements.

explosives for disposal operations.

(4) Exercise extreme care in handling and preparing high explosives for detonation. They are subject to detonation by heat, shock, and friction.

(5) Do not pack bomb fuze wells with explosives unless it can be positively confirmed that the fuze well does not contain any fuze components.

(6) Photo flash bombs must be handled with the same care as black powder filled munitions.

(7) WP UXO shall not be detonated into the ground. The UXO shall be counter-charged on the bottom center line when possible.

b. The following safety rules will be adhered to at all times:

(1) Carry blasting caps in approved containers and keep them out of the direct rays of the sun, and located at least 25 feet from other explosives, until they are needed for priming.

(2) Do not handle, use, or remain near explosives during the approach or progress of an electrical storm. All persons should retire to a place of safety.

(3) Do not use explosives or accessory equipment that is obviously deteriorated or damaged. They may cause a premature detonation or fail completely.

(4) Always point the explosive end of a blasting cap, detonators, and explosive devices away from the body during handling.

(5) Use only standard blasting caps of at least the equivalent of a commercial No. 8 blasting cap.

(6) Use electric blasting caps of the same manufacture for each demolition shot involving more than one cap.

(7) Do not bury blasting caps. Use detonating cord to position blasting caps above the ground. Buried blasting caps are subject to unobserved pressures and movement which could lead to premature firing or misfires.

(8) Test electric blasting caps for continuity at least 25 feet from any other explosives prior to connecting them to the firing circuit. Upon completion of testing, the

lead wires will be short-circuited by twisting the bare ends of the wires together. The wires will remain shunted until ready to be connected to the firing circuit.

c. When disposing of explosives by detonation, do not approach the disposal site for at least thirty minutes, after the expected detonation time, in the event of a misfire. When conducting non-electric procedures, the wait time shall be thirty minutes plus time fuse burn time.

d. A post-search of the detonation site shall be conducted to assure a complete disposal was accomplished.

e. If the situation dictates, protective measures to reduce shock, blast, and fragmentation shall be taken. Army Technical Manual (TM) 5-855-1, Fundamentals of Protective Design for Conventional Weapons, contains data on blast effects, ground shock, cratering, ejection, and fragmentation. The following distances shall be used unless protective measures are implemented.

(1) For non-fragmenting explosive materials, evacuation distance should be a minimum of 1250 feet.

(2) For fragmenting explosive materials, evacuation distance should be a minimum of 2500 feet. For bombs and projectiles with caliber 5-inch or greater, use a minimum evacuation distance of 4000 feet.

(3) Items with lugs, strong backs, tail plate sections, etc., should be oriented away from personnel locations as these items tend to travel further than normal fragmentation.

f. Consideration should be given to tamping the UXO to control fragments, if the situation warrants. Fragments shall be minimized not only to protect personnel but also property, such as buildings, trees, etc.

g. Open burning of explosives and smokeless powder or chemical decomposition of explosives shall not be accomplished without prior approval of the contracting officer.

(1) Do not inhale the smoke or fumes of burning pyrotechnic or incendiary materials. The fumes and dust from many of these materials are irritating and/or toxic if inhaled.

(2) Do not use water on incendiary fires. Water may induce a violent reaction or be completely ineffective, depending on the mixture.

APPENDIX B

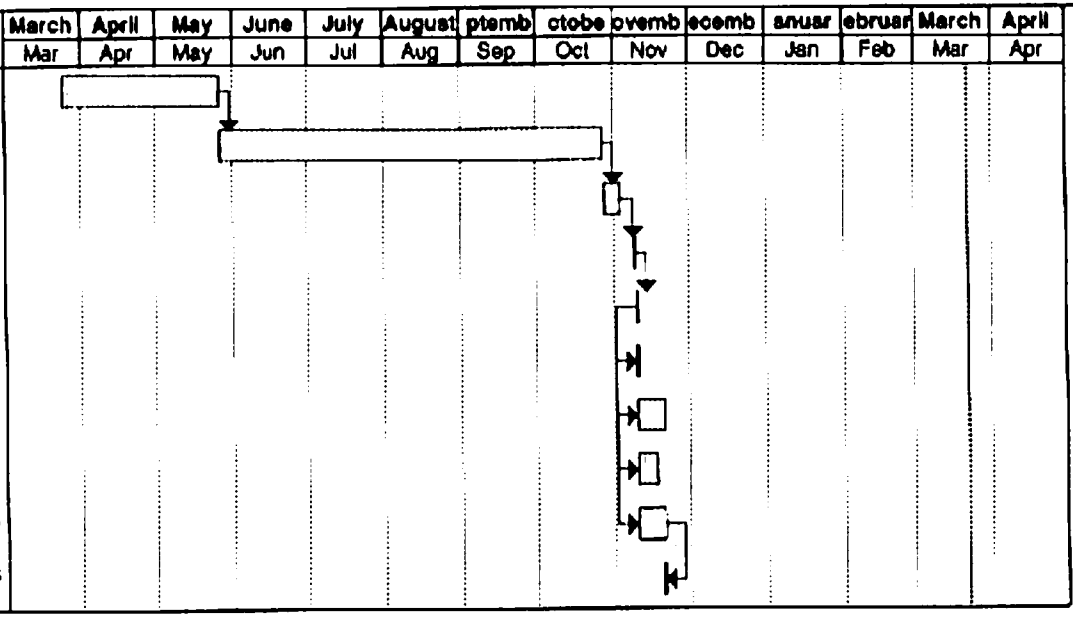
SEQUENCE OF OPERATIONS

Contract No. DACW05-95-D-0014, D.O. # 0014
USACE, LA District

Characterization of Spent Shell Casings

Environmental Chemical Corporation

ID	Task Name	Duration	Start	Finish
1	Prepare Work Plans	45d	Wed 3/25/98	Tue 5/26/98
2	Review of Work Plans by USACE	110d	Wed 5/27/98	Tue 10/27/98
3	Corrections to Work Plans by ECC	5d	Wed 10/28/98	Tue 11/3/98
4	Pre-Construction Meeting	1d	Mon 11/9/98	Mon 11/9/98
5	Mobilization	1d	Tue 11/10/98	Tue 11/10/98
6	Help Base personnel to setup/ prepare site	1d	Tue 11/10/98	Tue 11/10/98
7	OE operations	8d	Tue 11/10/98	Fri 11/20/98
8	Sample Collection	5d	Tue 11/10/98	Tue 11/17/98
9	Cutting/ Packaging samples	8d	Tue 11/10/98	Fri 11/20/98
10	Demobilization	1d	Fri 11/20/98	Fri 11/20/98



Project: Project2
Date: Mon 3/22/99

Task
Critical Task
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Critical Task
Rolled Up Milestone
Rolled Up Progress

APPENDIX C

SAMPLE RESULTS

Table 1: Sample Description Table

Sample ID	Sampling Date	Sample Location	Sample source	Notes
OF104-001	11/10/98	Range 104	M228 Practice Grenades Fuses	
OF109-001	11/10/98	Range 109	Mk 217 9MM SMAW Spotting Cartridges	
OF109-002	11/10/98	Range 109	9MM AT-4 Practice Cartridges	
OF109-003	11/11/98	Range 109	Cartridge Cal. 50, Ball M2	
OF113-001	11/11/98	Range 113	Cartridge 7.62MM, Ball, NATO, M80	
OF113-002	11/11/98	Range 113	Cartridge 5.56MM, Ball M855	
OF113-003	11/12/98	Range 113	Cartridge 7.62MM Special M118	
OF110-001	11/12/98	Range 110	Cartridge M385 E-4 40MM TP M169	
RS000-001	11/12/98 - 11/18/98	NA	Decon water	Rinsate sample - composite
OFAIP-001	11/13/98	Ammunition Issue Point	Cartridge, Aircraft, CCU-45B	
OFAIP-002	11/13/98	Ammunition Issue Point	Cartridge, Flare, Aircraft, SMB-75	
OFAIP-003	11/13/98	Ammunition Issue Point	Cartridge, Aircraft, CCU-107B	
OFAIP-004	11/13/98	Ammunition Issue Point	Cartridge, Chaff, Aircraft, RR-129AL	
OFAIP-005	11/13/98	Ammunition Issue Point	Cartridge, Aircraft, MJU-8B	
OFAIP-006	11/13/98	Ammunition Issue Point	Cartridge, Aircraft, MJU-32B	
OFAIP-007	11/13/98	Ammunition Issue Point	Cartridge, Aircraft, MF-29	
OFAIP-008	11/13/98	Ammunition Issue Point	Cartridge, Aircraft, MF-60	
OFAIP-009	11/13/98	Ammunition Issue Point	Cartridge, Aircraft, MK 2, Mod 1	
OF101-001	11/16/98	Range 101	Red Star, L306, Green Star, L314, White Star, L307	Illumination Signal, Ground
OF101-002	11/16/98	Range 101	Red Star, L311, White Star, L312	Illumination Signal, Ground, Parachute
OF101-003	11/16/98	Range 101	Green Smoke Grenade, M18, G940	
OF101-004	11/16/98	Range 101	Yellow Smoke Grenade, M18, G945	
OF101-005	11/16/98	Range 101	Red Smoke Grenade, M18, G950	
OF101-006	11/17/98	Range 101	60MM HE Mortar with Fuze, M935, B643	
OF101-007	11/17/98	Range 101	81MM HE Mortar with Fuze, M567, C256	
OF101-008	11/17/98	Range 101	25MM HEI Projectiles, A975	
OF101-009	11/17/98	Range 101	40MM HEDP, M430 Projectiles, B542	
OF101-010	11/18/98	Range 101	155MM, HE, RAP, Projectile, D579	
OF101-011	11/18/98	Range 101	AT-4, C995	
OF101-012	11/18/98	Range 101	SMAW, HE, HtrX05	
OF101-013	11/18/98	Range 101	60MM WP Mortar with Fuze, M935, B630	

Table 1: Sample Description Table

Sample ID	Sampling Date	Sample Location	Sample source	Notes
OF101-014	11/18/98	Range 101	155MM, WP, Projectile, D550	
OF-DRMO-001	11/18/98	DRMO	9MM Ball, Cartridge, M882, A363	

Notes :
RS000-001 is a composite sample of rinsates collected over a period of 5 days

TABLE 2 - 29 Palms MCAGCC Sample Results Summary

Sample ID	Corrosivity Method 9045 (pH)	Reactivity - Total Sulfide Method 9030 (mg/kg)	Reactivity - Total Cyanide Method 9030 (mg/kg)	Ignitability (Flashpoint) Method 1020 (DEG F)	Explosives - CDHS TTLC Method 8330 (µg/L)	Explosives - CDHS STLC Method 8330 (µg/L)	Explosives - TCLP Method 8330 (µg/L)	Tetrazene- CDHS TTLC Method 8331 (mg/kg)	Tetrazene- CDHS STLC Method 8331 (µg/L)	Tetrazene- TCLP Method 8331 (µg/L)	Toxicity Bioassay Method CADHS (LC50>750mg/l)
OF104-001	9.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OF109-001	6.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OF109-003	8.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OF113-001	7.4	ND	0.86	ND	ND	ND	ND	ND	ND	ND	Passed
OF113-002	7.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OF113-003	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OF110-001	7.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
RS000-001		ND	ND	NA							
OFAIP-001	7.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OFAIP-002	7.4	ND	ND	ND	ND	See Table 4	See Table 5	ND	ND	ND	Passed
OFAIP-003	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OFAIP-004	7.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OFAIP-005	8.2	ND	5.8	ND	ND	See Table 4	See Table 5	ND	ND	ND	Passed
OFAIP-006	7.1	ND	ND	ND	See Table 3	See Table 4	See Table 5	ND	ND	ND	Passed
OFAIP-007	8.7	ND	ND	ND	See Table 3	ND	See Table 5	ND	ND	ND	Passed
OFAIP-008	8.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OFAIP-009	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OF101-001	9	102	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OF101-002	8.4	28.1	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OF101-003	10.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OF101-004	11	ND	24	ND	ND	ND	ND	ND	ND	ND	Passed
OF101-005	10.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OF101-006	8.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OF101-007	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OF101-008	9.6	ND	4.1	ND	ND	ND	ND	ND	ND	ND	Passed
OF101-009	8.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OF101-010	6.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OF101-011	7.5	ND	0.68	ND	ND	ND	ND	ND	ND	ND	Passed
OF101-012	8	ND	1	ND	ND	ND	ND	ND	ND	ND	Passed
OF101-013	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OF101-014	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed
OF-DRMO-001	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	Passed

Notes:
NA - Not Applicable
ND - Non Detect

ECC
1240 Bayshore Highway
Burlingame, CA 94010

Table 3 - Nitroaromatics & Nitramines by HPLC - Method 8330 TTCL

Sample ID	HMX	1,3,5 - Trinitrobenzene	RDX	1,3 - Dinitrobenzene	Nitrobenzene	2,4,6 - Trinitrotoluene	Tetryl	2,4 - Trinitrotoluene	2,6 - Trinitrotoluene	2-AM-DNT	4-AM-DNT	2-Nitrotoluene	4-Nitrotoluene	3-Nitrotoluene
OFAIP-006	5.1	ND	22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
OFAIP-007	15	ND	87	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All results reported in mg/kg

Table 4 - Nitroaromatics & Nitramines by HPLC - Method 8330 STCL

Sample ID	HMX	1,3,5 - Trinitrobenzene	RDX	1,3 - Dinitrobenzene	Nitrobenzene	2,4,6 - Trinitrotoluene	Tetryl	2,4 - Trinitrotoluene	2,6 - Trinitrotoluene	2-AM-DNT	4-AM-DNT	2-Nitrotoluene	4-Nitrotoluene	3-Nitrotoluene
OFAIP-002	700	ND	3100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
OFAIP-005	67	ND	73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
OFAIP-006	95	ND	82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All results in µg/L

ECC
1240 Bayshore Highway
Burlingame, CA 94010

Table 5 - Nitroaromatics & Nitramines by HPLC - Method 8330 TCLP

Sample ID	HMX	1,3,5 - Trinitrobenzene	RDX	1,3 - Dinitrobenzene	Nitrobenzene	2,4,6 - Trinitrotoluene	Tetryl	2,4 - Trinitrotoluene	2,6 - Trinitrotoluene	2-AM-DNT	4-AM-DNT	2- Nitrotoluene	4- Nitrotoluene	3- Nitrotoluene
OFAIP-002	60	ND	1200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
OFAIP-005	110	ND	420	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
OFAIP-006	150	ND	830	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
OFAIP-007	ND	ND	17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All results in µg/L

APPENDIX D

SITE PHOTOGRAPHS

PHOTOGRAPH LOG

ECC Project No.: 5410-014
Contract # DACW05-95-D-0014-0014

Location: MCAGCC, Twenty-Nine Palms, CA
Description: Sample Collection

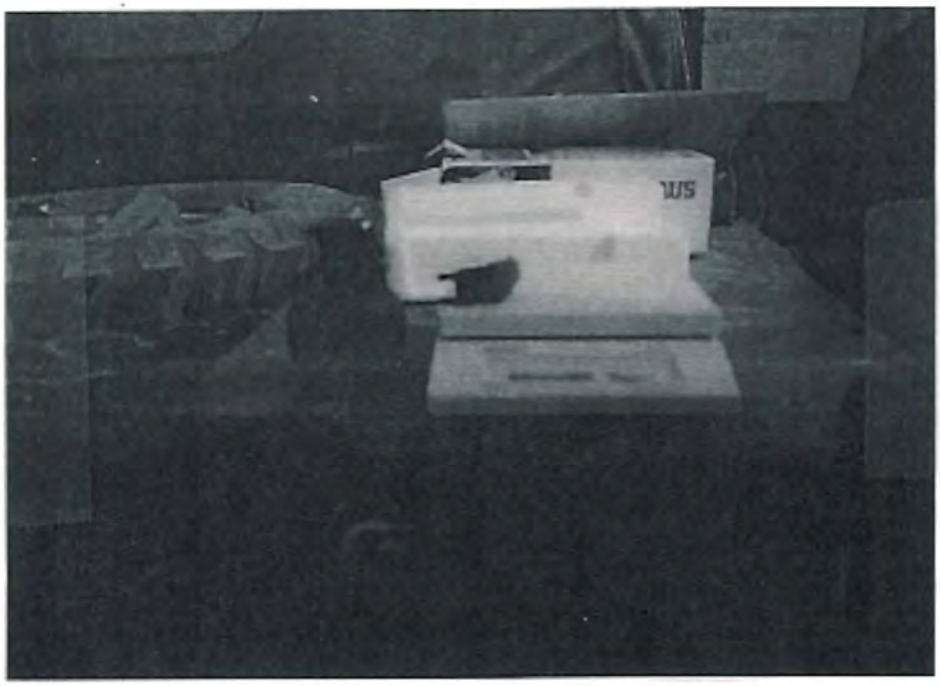
Contractor: Environmental Chemical Corp.

ECC Project No.: 5410-014
Contract # DACW05-95-D-0014-0014

Location: MCAGCC, Twenty-Nine Palms, CA
Description: Sample Collection

Contractor: Environmental Chemical Corp.

PHOTOGRAPH LOG



ECC Project No.: 5410-014
Contract # DACW05-95-D-0014-0014

Location: MCAGCC, Twenty-Nine Palms, CA
Description: Sample Weighing

Contractor: Environmental Chemical Corp.

ECC Project No.: 5410-014
Contract # DACW05-95-D-0014-0014

Location: MCAGCC, Twenty-Nine Palms, CA
Description: Sample packaging prior to cutting operations

Contractor: Environmental Chemical Corp.

PHOTOGRAPH LOG

ECC Project No.: 5410-014
Contract # DACW05-95-D-0014-0014

Location: MCAGCC, Twenty-Nine Palms, CA
Description: Sample Cutting

Contractor: Environmental Chemical Corp.

ECC Project No.: 5410-014
Contract # DACW05-95-D-0014-0014

Location: MCAGCC, Twenty-Nine Palms, CA
Description: Sample Packaging

Contractor: Environmental Chemical Corp

PHOTOGRAPH LOG

ECC Project No.: 5410-014
Contract # DACW05-95-D-0014-0014

Location: MCAGCC, Twenty-Nine Palms, CA
Description: Sample Collection

Contractor: Environmental Chemical Corp

ECC Project No.: 5410-014
Contract # DACW05-95-D-0014-0014

Location: MCAGCC, Twenty-Nine Palms, CA
Description: Detonating/Functioning of Sample

Contractor: Environmental Chemical Corp

PHOTOGRAPH LOG

ECC Project No.: 5410-014
Contract # DACW05-95-D-0014-0014

Location: MCAGCC, Twenty-Nine Palms, CA
Description: Detonation of Ordnance Items

Contractor: Environmental Chemical Corp.

ECC Project No.: 5410-014
Contract # DACW05-95-D-0014-0014

Location: MCAGCC, Twenty-Nine Palms, CA
Description: Sample Collection

Contractor: Environmental Chemical Corp.

PHOTOGRAPH LOG

ECC Project No.: 5410-014
Contract # DACW05-95-D-0014-0014

Location: MCAGCC, Twenty-Nine Palms, CA
Description: Detonation/Functioning of Sample

Contractor: Environmental Chemical Corp.

ECC Project No.: 5410-014
Contract # DACW05-95-D-0014-0014

Location: MCAGCC, Twenty-Nine Palms, CA
Description: Setup procedures for Ordnance Detonation

Contractor: Environmental Chemical Corp.

PHOTOGRAPH LOG

ECC Project No.: 5410-014
Contract # DACW05-95-D-0014-0014

Location: MCAGCC, Twenty-Nine Palms, CA
Description: Setup for Detonating/Functioning of Sample

Contractor: Environmental Chemical Corp.

ECC Project No.: 5410-014
Contract # DACW05-95-D-0014-0014

Location: MCAGCC, Twenty-Nine Palms, CA
Description: Decontamination Procedures

Contractor: Environmental Chemical Corp.

PHOTOGRAPH LOG

ECC Project No: 5410-014
Contract #: DACW05-95-D-0014-0014

Location: MCAGCC, Twenty-Nine Palms, CA
Description: Decontamination of Sampling Equipment

Contractor: Environmental Chemical Corp.

APPENDIX E

SITE QC/ SAFETY REPORTS

PREPARATORY INSPECTION OUTLINE
(Part-I)

Contract No.: DACW05-95-D-0014 Date: 11/9/98

Title and No. of Technical Section: SAMPLING AND CHARACTERIZATION OF SPENT SOILS

Reference Contract Drawings: N/A

A. PLANNED ATTENDENTS:

	NAME	POSITION	COMPANY
1.	SIVAKUMA KALYANON	QC	ECC
2.	BRAD WARENIUS	SUPOS	ECC
3.	CORRISON CANNON	CHEMIST	ECC
4.	MICHAEL QUINLAN	CHEMIST	ECC

B. SUBMITTALS REQUIRED TO BEGIN WORK:

	ITEM	SUBMITTAL NO.	ACTION CODE
a.	WORK PLAN		
b.	SAMPLING PLAN		
c.	SAFETY PLAN		
d.			

I HERBY DECLARE THAT THE ABOVE REQUIRED MATERIALS DELIVERED TO THE JOBSITE ARE CERTIFIED TO BE THE SAME AS THOSE SUBMITTED AND APPROVED.

QUALITY CONTROL REPRESENTATIVE

C. EQUIPMENT TO BE USED IN EXECUTING WORK:

a. BACKHOE
b.
c.

D. WORK AREAS EXAMINED TO ASCERTAIN THAT ALL PRELIMINARY WORK HAS BEEN COMPLETED:

YES

E. METHODS AND PROCEDURES FOR PERFORMING QUALITY CONTROL - INCLUDING SPECIFIC TESTING REQUIREMENTS:

YES

THE ABOVE METHODS AND PROCEDURES OUTLINED ARE CERTIFIED TO COMPLY WITH THE CONTRACT REQUIREMENTS AND WILL BE PERFORMED AS PLANNED AND SPECIFIED.

QUALITY CONTROL REPRESENTATIVE

CONTRACTOR QUALITY CONTROL REPORT

REPORT NO. 001

DATE 11/10/95

PROJECT/CONTRACT NUMBER CHARACTERIZATION & DISPOSAL OF SPENT SHELL CASINGS AT NIAGCC / DACW05-95-D-0014

SUPERINTENDENT BILL WALENIUS

CONTRACTOR ECC

WEATHER SUNNY

PRECIPITATION PAST 24 HOURS (IN INCHES) 1 TEMPERATURE F MINIMUM 55 MAXIMUM 65

WERE THERE ANY DELAYS IN WORK PROGRESS TODAY? No X Yes___ If Yes, Explain:

VERBAL INSTRUCTIONS GIVEN BY THE GOVERNMENT:

NONE

HAS ANYTHING DEVELOPED WHICH MIGHT LEAD TO A CHANGE ORDER OR CLAIM? No X Yes___ If Yes, Explain:

NOTE: Official notification of claim must be made to the Contracting Officer by seperate correspondence.

SAFETY INSPECTION/MEETINGS: Indicate inspections made, items inspected, deficiencies noted and corrective action taken.

TAIL GATE SAFETY MEETING CONDUCTED BY SSHO.

WERE THERE ANY LOST TIME ACCIDENTS THIS DATE? No X Yes___ If Yes, attach accident report.

PRIME CONTRACTOR/SUBCONTRACTOR WORKFORCE
(If space provided below is inadequate, use additional sheets)

No.	TRADE	HOURS	EMPLOYER	No.	TRADE	HOURS	EMPLOYER
1	PM	8	ECC				
1	QC	8	ECC				
1	SUXOS	8	ECC				
1	UXOS	8	ECC				
2	CHEMIST	16	ECC				

CUMULATIVE TOTAL HOURS OF WORK HOURS FROM PREVIOUS REPORT 0

TOTAL WORK HOURS ON JOB SITE THIS DATE 48

TOTAL WORK HOURS FROM START OF CONSTRUCTION 48

MAJOR ITEMS OF EQUIPMENT

TYPE/CAPACITY	No.	STANDBY HOURS	OPERATING HOURS
NONE			

9. THREE PHASE INSPECTION

ADVANCE NOTICE OF PREPARATORY, INITIAL OR FINAL FOLLOW-UP INSPECTION: (minimum five working days notice required)

PREPARATORY INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Preparatory Checklist.
SAMPLING ACTIVITY

INITIAL INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Initial Checklist.

FINAL FOLLOW-UP INSPECTION HELD TODAY: Indicate NAS Activity Number. Attach Final Follow-up Checklist.

10. ACTIVITIES IN PROGRESS: Attach daily CQC follow-up inspection deficiencies/corrections noted.

ACTIVITY NUMBER	S=START C=CONTINUING F=FINISH	DESCRIPTION OF WORK ACTUALLY PERFORMED/MAJOR MATERIAL DELIVERIES TODAY
1	F	M 225 PRACTICE GRENADE FUZES SAMPLED
2	F	MK 217 9MM SMOKE SAMPLED
3	S	9MM AT-4 PRACTICE CARTRIDGE SAMPLED & ARCHIVED

11. CQC TESTING

ACTIVITY NUMBER	DESCRIPTION OF TESTS PERFORMED	PASSED/FAILED
	GENERAL SAMPLING PROCEDURE MONITORED	PASSED

12. USER SCHOOLING CONDUCTED:

ACTIVITY NUMBER	DESCRIPTION OF SCHOOLING
	NONE

13. INSTALLED PROPERTY PRICING DATA ATTACHED: YES___ NO X

14. TRANSFERRED PROPERTY, DD-1149 ATTACHED: YES___ NO X

15. QA COMMENTS CORRECTED TODAY: YES___ NO X

16. EQUIPMENT SAFETY CHECKLIST ATTACHED: YES___ NO X

GENERAL COMMENTS:

- Samples collected from RANGE 104 & 109;
- Samples cut to appropriate size and weighed;
- Samples packaged for shipping;
- All equipment decontaminated and larson water collected for disposal.

CONTRACTOR CERTIFICATION: On behalf of the contractor, I certify that this report is complete and correct and all equipment and material used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as noted above.

Authorized Contractor Representative: _____

Report Date: 10/10/95 Date Submitted to Government Representative: 11/13/95

CONTRACTOR QUALITY CONTROL REPORT

REPORT NO. 002

DATE 11/11/95

PROJECT/CONTRACT NUMBER 29 PALMS DACW65-95-D-0014

SUPERINTENDENT BILL WALENIUS

CONTRACTOR ECC

WEATHER RAINY

PRECIPITATION PAST 24 HOURS (IN INCHES) 1" 1 TEMPERATURE F MINIMUM 55 MAXIMUM 65

WERE THERE ANY DELAYS IN WORK PROGRESS TODAY? No X Yes___ If Yes, Explain:

VERBAL INSTRUCTIONS GIVEN BY THE GOVERNMENT:

Wipe samples not to be taken at this time

HAS ANYTHING DEVELOPED WHICH MIGHT LEAD TO A CHANGE ORDER OR CLAIM? No X Yes___ If Yes, Explain:

NOTE: Official notification of claim must be made to the Contracting Officer by seperate correspondence.

SAFETY INSPECTION/MEETINGS: Indicate inspections made, items inspected, deficiencies noted and corrective action taken.

Tool gate safety meeting conducted

WERE THERE ANY LOST TIME ACCIDENTS THIS DATE? No X Yes___ If Yes, attach accident report.

PRIME CONTRACTOR/SUBCONTRACTOR WORKFORCE
(If space provided below is inadequate, use additional sheets)

No.	TRADE	HOURS	EMPLOYER	No.	TRADE	HOURS	EMPLOYER
1	QC	8	ECC				
1	SUPOS	8	ECC				
2	CHEMIST	16	ECC				
1	UXOS	8	ECC				

CUMULATIVE TOTAL HOURS OF WORK HOURS FROM PREVIOUS REPORT 48

TOTAL WORK HOURS ON JOB SITE THIS DATE 40

TOTAL WORK HOURS FROM START OF CONSTRUCTION 88

MAJOR ITEMS OF EQUIPMENT

TYPE/CAPACITY	No.	STANDBY HOURS	OPERATING HOURS
NONE			

9. THREE PHASE INSPECTION

ADVANCE NOTICE OF PREPARATORY, INITIAL OR FINAL FOLLOW-UP INSPECTION: (minimum five working days notice required)

PREPARATORY INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Preparatory Checklist.

INITIAL INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Initial Checklist.

FINAL FOLLOW-UP INSPECTION HELD TODAY: Indicate NAS Activity Number. Attach Final Follow-up Checklist.

10. ACTIVITIES IN PROGRESS: Attach daily CQC follow-up inspection deficiencies/corrections noted.

ACTIVITY NUMBER	S=START C=CONTINUING F=FINISH	DESCRIPTION OF WORK ACTUALLY PERFORMED/MAJOR MATERIAL DELIVERIES TODAY
1	F	Cartridge Cal .50, Ball M2 sampled from Bay 10
2	F	Cartridge 7.62 MM, Ball WAIN M80 sampled from Range 113.
3	F	Cartridge, 5.56 MM, Ball M855 sampled from Range 113. QC samples collected from Cal .50. Samples cut and weighed & meet the sampling criteria.

11. CQC TESTING

ACTIVITY NUMBER	DESCRIPTION OF TESTS PERFORMED	PASSED/FAILED
	SAMPLING PROCEDURE OBSERVED.	PASSED.

12. USER SCHOOLING CONDUCTED:

ACTIVITY NUMBER	DESCRIPTION OF SCHOOLING
	N/A

13. INSTALLED PROPERTY PRICING DATA ATTACHED: YES___ NO X

14. TRANSFERRED PROPERTY, DD-1149 ATTACHED: YES___ NO X

15. QA COMMENTS CORRECTED TODAY: YES___ NO X

16. EQUIPMENT SAFETY CHECKLIST ATTACHED: YES___ NO X

GENERAL COMMENTS:

2 personnel from USACE present on site. Jim Reed.

CONTRACTOR CERTIFICATION: On behalf of the contractor, I certify that this report is complete and correct and all equipment and material used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as noted above.

Authorized Contractor Representative: [signature]

Report Date: 11/11/95 Date Submitted to Government Representative: 11/13/95

CONTRACTOR QUALITY CONTROL REPORT

REPORT NO. 003

DATE 11/12/98

PROJECT/CONTRACT NUMBER 29 PALMS MCAGCC DAKW05-95-D-0014

SUPERINTENDENT BILL WALENIUS

CONTRACTOR ECC

WEATHER SUNNY

PRECIPITATION PAST 24 HOURS (IN INCHES) 1 TEMPERATURE F MINIMUM 52 MAXIMUM 72

WERE THERE ANY DELAYS IN WORK PROGRESS TODAY? No X Yes__ If Yes, Explain:

VERBAL INSTRUCTIONS GIVEN BY THE GOVERNMENT:

NONE

HAS ANYTHING DEVELOPED WHICH MIGHT LEAD TO A CHANGE ORDER OR CLAIM? No X Yes__ If Yes, Explain:

NOTE: Official notification of claim must be made to the Contracting Officer by seperate correspondence.

SAFETY INSPECTION/MEETINGS: Indicate inspections made, items inspected, deficiencies noted and corrective action taken

Daily tail gate safety meeting conducted

WERE THERE ANY LOST TIME ACCIDENTS THIS DATE? No X Yes__ If Yes, attach accident report.

PRIME CONTRACTOR/SUBCONTRACTOR WORKFORCE
(If space provided below is inadequate, use additional sheets)

No.	TRADE	HOURS	EMPLOYER	No.	TRADE	HOURS	EMPLOYER
1	QC	8	ECC				
1	SUXOS	8	ECC				
2	CHEMIST	16	ECC				
1	UXOS	8	ECC				

CUMULATIVE TOTAL HOURS OF WORK HOURS FROM PREVIOUS REPORT 88

TOTAL WORK HOURS ON JOB SITE THIS DATE 40

TOTAL WORK HOURS FROM START OF CONSTRUCTION 128

MAJOR ITEMS OF EQUIPMENT

TYPE/CAPACITY	No.	STANDBY HOURS	OPERATING HOURS
NONE			

9. THREE PHASE INSPECTION

ADVANCE NOTICE OF PREPARATORY, INITIAL OR FINAL FOLLOW-UP INSPECTION: (minimum five working days notice required)

PREPARATORY INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Preparatory Checklist.

INITIAL INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Initial Checklist.

FINAL FOLLOW-UP INSPECTION HELD TODAY: Indicate last Activity Number. Attach Final Follow-up Checklist.

10. ACTIVITIES IN PROGRESS: Attach daily CQC follow-up inspection deficiencies/corrections noted.

ACTIVITY NUMBER	S=START C=CONTINUING F=FINISH	DESCRIPTION OF WORK ACTUALLY PERFORMED/MAJOR MATERIAL DELIVERIES TODAY
1	F	Sample collected from Range 113 - Cotridge 7.62MM
2	F	Sample collected from Range 109 - Cotridge 40MM
3	F	1 QC sample collected for Cotridge 7.62MM

11. CQC TESTING

ACTIVITY NUMBER	DESCRIPTION OF TESTS PERFORMED	PASSED/FAILED
	Sample preparation observed	Passed

12. USER SCHOOLING CONDUCTED:

ACTIVITY NUMBER	DESCRIPTION OF SCHOOLING
	N/A

13. INSTALLED PROPERTY PRICING DATA ATTACHED: YES___ NO X

14. TRANSFERRED PROPERTY, DD-1149 ATTACHED: YES___ NO X

15. QA COMMENTS CORRECTED TODAY: YES___ NO X

16. EQUIPMENT SAFETY CHECKLIST ATTACHED: YES___ NO X

GENERAL COMMENTS:

Three samples collected. One sample collected by MARINE personnel. One QC sample collected.

CONTRACTOR CERTIFICATION: On behalf of the contractor, I certify that this report is complete and correct and all equipment and material used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as noted above.

Authorized Contractor Representative: _____

Report Date: 11/12/99 Date Submitted to Government Representative: 11/13/99

CONTRACTOR QUALITY CONTROL REPORT

REPORT NO. 004

DATE 11/13/95

PROJECT/CONTRACT NUMBER 29 PALMS MCAGCC DACW05-95-D-0014

SUPERINTENDENT BILL WALENIUS

CONTRACTOR ECC

WEATHER SUNNY

PRECIPITATION PAST 24 HOURS (IN INCHES) [ ] TEMPERATURE F MINIMUM 55 MAXIMUM 78

WERE THERE ANY DELAYS IN WORK PROGRESS TODAY? No X Yes___ If Yes, Explain:

VERBAL INSTRUCTIONS GIVEN BY THE GOVERNMENT:

NONE

HAS ANYTHING DEVELOPED WHICH MIGHT LEAD TO A CHANGE ORDER OR CLAIM? No X Yes___ If Yes, Explain:

NOTE: Official notification of claim must be made to the Contracting Officer by seperate correspondence.

SAFETY INSPECTION/MEETINGS: Indicate inspections made, items inspected, deficiencies noted and corrective action taken.

Daily trail gate safety meeting conducted

WERE THERE ANY LOST TIME ACCIDENTS THIS DATE? No X Yes___ If Yes, attach accident report.

PRIME CONTRACTOR/SUBCONTRACTOR WORKFORCE
(If space provided below is inadequate, use additional sheets)

No.	TRADE	HOURS	EMPLOYER	No.	TRADE	HOURS	EMPLOYER
1	QC	8	ECC				
1	SUXOS	8	ECC				
1	UXOS	8	ECC				
2	CHEMIST	16	ECC				

CUMULATIVE TOTAL HOURS OF WORK HOURS FROM PREVIOUS REPORT 128

TOTAL WORK HOURS ON JOB SITE THIS DATE 40

TOTAL WORK HOURS FROM START OF CONSTRUCTION 168

MAJOR ITEMS OF EQUIPMENT

TYPE/CAPACITY	No.	STANDBY HOURS	OPERATING HOURS
NONE			

9. THREE PHASE INSPECTION

ADVANCE NOTICE OF PREPARATORY, INITIAL OR FINAL FOLLOW-UP INSPECTION: (minimum five working days notice required)

PREPARATORY INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Preparatory Checklist.

INITIAL INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Initial Checklist.

FINAL FOLLOW-UP INSPECTION HELD TODAY: Indicate NAS Activity Number. Attach Final Follow-up Checklist.

10. ACTIVITIES IN PROGRESS: Attach daily CQC follow-up inspection deficiencies/corrections noted.

ACTIVITY NUMBER	S=START C=CONTINUING F=FINISH	DESCRIPTION OF WORK ACTUALLY PERFORMED/MAJOR MATERIAL DELIVERIES TODAY
1	F	- Samples collected from 21 Palmis Ammunition Supply Point. - 9 different samples collected. - 7 samples prepared for shipping to lab. - Total of 17 samples prepared and shipped to laboratory. - 2 QC samples included in shipment

11. CQC TESTING

ACTIVITY NUMBER	DESCRIPTION OF TESTS PERFORMED	PASSED/FAILED
	2 QC samples shipped to the laboratory for analysis.	

12. USER SCHOOLING CONDUCTED:

ACTIVITY NUMBER	DESCRIPTION OF SCHOOLING
	N/A

13. INSTALLED PROPERTY PRICING DATA ATTACHED: YES___ NO X

14. TRANSFERRED PROPERTY, DD-1149 ATTACHED: YES___ NO X

15. QA COMMENTS CORRECTED TODAY: YES___ NO X

16. EQUIPMENT SAFETY CHECKLIST ATTACHED: YES___ NO X

GENERAL COMMENTS:

CONTRACTOR CERTIFICATION: On behalf of the contractor, I certify that this report is complete and correct and all equipment and material used and work performed during this reporting period are in compliance with the contract plans and specifications to the best of my knowledge, except as noted above

Authorized Contractor Representative: _____

Report Date: 11/13/98 Date Submitted to Government Representative: 11/13/98

CONTRACTOR QUALITY CONTROL REPORT

REPORT NO. 005

DATE 11/16/96

PROJECT/CONTRACT NUMBER 29 PALMS MCAGCC DACW05-95-D-0014

SUPERINTENDENT BILL WALENUS

CONTRACTOR ECC

WEATHER SUNNY

PRECIPITATION PAST 24 HOURS (IN INCHES) 1 TEMPERATURE F MINIMUM 55 MAXIMUM 75

WERE THERE ANY DELAYS IN WORK PROGRESS TODAY? No X Yes___ If Yes, Explain:

VERBAL INSTRUCTIONS GIVEN BY THE GOVERNMENT:

NONE

HAS ANYTHING DEVELOPED WHICH MIGHT LEAD TO A CHANGE ORDER OR CLAIM? No X Yes___ If Yes, Explain:

NOTE: Official notification of claim must be made to the Contracting Officer by seperate correspondence.

SAFETY INSPECTION/MEETINGS: Indicate inspections made, items inspected, deficiencies noted and corrective action taken.

Routine trial gate safety meeting conducted

WERE THERE ANY LOST TIME ACCIDENTS THIS DATE? No X Yes___ If Yes, attach accident report.

PRIME CONTRACTOR/SUBCONTRACTOR WORKFORCE
(If space provided below is inadequate, use additional sheets)

No.	TRADE	HOURS	EMPLOYER	No.	TRADE	HOURS	EMPLOYER
1	QC	8	ECC				
1	SUPOS	8	ECC				
1	UXOS	8	ECC				
2	CHEMIST	16	ECC				

CUMULATIVE TOTAL HOURS OF WORK HOURS FROM PREVIOUS REPORT 168

TOTAL WORK HOURS ON JOB SITE THIS DATE 40

TOTAL WORK HOURS FROM START OF CONSTRUCTION 208

MAJOR ITEMS OF EQUIPMENT

TYPE/CAPACITY	No.	STANDBY HOURS	OPERATING HOURS
NONE			

9. THREE PHASE INSPECTION

ADVANCE NOTICE OF PREPARATORY, INITIAL OR FINAL FOLLOW-UP INSPECTION: (minimum five working days notice required)

PREPARATORY INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Preparatory Checklist.

INITIAL INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Initial Checklist.
SAMPLING Activity

FINAL FOLLOW-UP INSPECTION HELD TODAY: Indicate NAS Activity Number. Attach Final Follow-up Checklist.

10. ACTIVITIES IN PROGRESS: Attach daily CQC follow-up inspection deficiencies/corrections noted.

ACTIVITY NUMBER	S=START C=CONTINUING F=FINISH	DESCRIPTION OF WORK ACTUALLY PERFORMED/MAJOR MATERIAL DELIVERIES TODAY
1	F	One sample collected of Signal, Illumination - Red, Green & White Star.
2	F	One sample collected of Signal, Illumination - Incandescent Red & White Star.
3	F	Three samples collected from Grenade, Smoke - Yellow, Red & Green.

11. CQC TESTING

ACTIVITY NUMBER	DESCRIPTION OF TESTS PERFORMED	PASSED/FAILED
	SAMPLE PREPARATION & EQUIPMENT CHECK	PASSED

12. USER SCHOOLING CONDUCTED:

ACTIVITY NUMBER	DESCRIPTION OF SCHOOLING
	N/A

13. INSTALLED PROPERTY PRICING DATA ATTACHED: YES___ NO ✓

14. TRANSFERRED PROPERTY, DD-1149 ATTACHED: YES___ NO ✓

15. QA COMMENTS CORRECTED TODAY: YES___ NO ✓

16. EQUIPMENT SAFETY CHECKLIST ATTACHED: YES___ NO ✓

GENERAL COMMENTS:

Due to unavailability of backup, flare grenades were imploded. 5 samples collected of various flares.

CONTRACTOR CERTIFICATION: On behalf of the contractor, I certify that this report is complete and correct and all equipment and material used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as noted above.

Authorized Contractor Representative: _____

Report Date: 11/16/98 Date Submitted to Government Representative: 11/16/98

(Sample of Typical Form)

INITIAL PHASE CHECKLIST

Contract No.: DACW05-95-D-0014 Date: 11/16/98

Specification Paragraph or Section: _____

Description and Location of Work Inspected: SAMPLING ACTIVITY AT RANGE 101, MCAGCC

REFERENCE CONTRACT DRAWINGS: N/A

A. PERSONNEL PRESENT:

NAME	POSITION	COMPANY
1. SIVARAMA KRISHNAN	QC	ECC
2. BILL WALENIUS	CVOS	ECC
3. CHRISTIAN CANNON	CHEMIST	ECC
4. MIKE [illegible]	CHEMIST	ECC
RICHARD SCHNEIDER	USOS	ECC

B. MATERIALS BEING USED ARE IN STRICT COMPLIANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS: YES ✓ NO ____

IF NOT, EXPLIAN: _____

C. PROCEDURES AND/OR WORK METHODS WITHNESSED ARE IN STRICT COMPLIANCE WITH THE CONTRACT SPECIFICATIONS: YES ✓ NO: ____

IF NOT, EXPLIAN: _____

D. WORKMANSHIP IS ACCEPTABLE: YES ✓ NO ____

STATE AREAS WHERE IMPROVEMENT IS NEEDED: _____

E. SAFETY VIOLATIONS NOTED: YES ____ NO ✓

IF YES, CORRECTIVE ACTION TAKEN: _____

QUALITY CONTROL REPRESENTATIVE

042BZ

CONTRACTOR QUALITY CONTROL REPORT

REPORT NO. 006

DATE 11/17/95

PROJECT/CONTRACT NUMBER 29 PALMS, MCAGCC DACW09-95-D-0014

SUPERINTENDENT BILL WALENIUS

CONTRACTOR ECC

WEATHER SUNNY

PRECIPITATION PAST 24 HOURS (IN INCHES) 1 TEMPERATURE F MINIMUM 55 MAXIMUM 75

WERE THERE ANY DELAYS IN WORK PROGRESS TODAY? No X Yes___ If Yes, Explain:

VERBAL INSTRUCTIONS GIVEN BY THE GOVERNMENT:

NONE

HAS ANYTHING DEVELOPED WHICH MIGHT LEAD TO A CHANGE ORDER OR CLAIM? No X Yes___ If Yes, Explain:

NOTE: Official notification of claim must be made to the Contracting Officer by seperate correspondence.

SAFETY INSPECTION/MEETINGS: Indicate inspections made, items inspected, deficiencies noted and corrective action taken.

Routine tool gate safety meeting conducted

WERE THERE ANY LOST TIME ACCIDENTS THIS DATE? No X Yes___ If Yes, attach accident report.

PRIME CONTRACTOR/SUBCONTRACTOR WORKFORCE
(If space provided below is inadequate, use additional sheets)

No.	TRADE	HOURS	EMPLOYER	No.	TRADE	HOURS	EMPLOYER
1	QC	8	ECC				
1	SUPOS	8	ECC				
1	UXOS	8	ECC				
2	CHEMIST	16	ECC				

CUMULATIVE TOTAL HOURS OF WORK HOURS FROM PREVIOUS REPORT 208

TOTAL WORK HOURS ON JOB SITE THIS DATE 40

TOTAL WORK HOURS FROM START OF CONSTRUCTION 248

MAJOR ITEMS OF EQUIPMENT

TYPE/CAPACITY	No.	STANDBY HOURS	OPERATING HOURS
NONE			

9. THREE PHASE INSPECTION

ADVANCE NOTICE OF PREPARATORY, INITIAL OR FINAL FOLLOW-UP INSPECTION: (minimum five working days notice required)

PREPARATORY INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Preparatory Checklist.

INITIAL INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Initial Checklist.

FINAL FOLLOW-UP INSPECTION HELD TODAY: Indicate NAS Activity Number. Attach Final Follow-up Checklist.

10. ACTIVITIES IN PROGRESS: Attach daily CQC follow-up inspection deficiencies/corrections noted.

ACTIVITY NUMBER	S=START C=CONTINUING F=FINISH	DESCRIPTION OF WORK ACTUALLY PERFORMED/MAJOR MATERIAL DELIVERIES TODAY
1	F	One sample collected from each - 25 MM IFE Projectile - 40 MM IFE Projectile - 81 MM IFE Mortar w/ tape. - 60 MM IFE Mortar w/ tape.

11. CQC TESTING

ACTIVITY NUMBER	DESCRIPTION OF TESTS PERFORMED	PASSED/FAILED
	N/A	

12. USER SCHOOLING CONDUCTED:

ACTIVITY NUMBER	DESCRIPTION OF SCHOOLING
	N/A

13. INSTALLED PROPERTY PRICING DATA ATTACHED: YES___ NO X

14. TRANSFERRED PROPERTY, DD-1149 ATTACHED: YES___ NO X

15. QA COMMENTS CORRECTED TODAY: YES___ NO X

16. EQUIPMENT SAFETY CHECKLIST ATTACHED: YES___ NO X

GENERAL COMMENTS:

4 samples taken; 1 QC sample taken.

CONTRACTOR CERTIFICATION: On behalf of the contractor, I certify that this report is complete and correct and all equipment and material used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as noted above.

Authorized Contractor Representative: _____

Report Date: 11/17/95 Date Submitted to Government Representative 11/23/95

CONTRACTOR QUALITY CONTROL REPORT

REPORT NO. 007

DATE 11/18/95

PROJECT/CONTRACT NUMBER 29 PALMS MCAGCC DACW05-95-D-0014

SUPERINTENDENT BILL WALENTUS

CONTRACTOR ECC

WEATHER SUNNY

PRECIPITATION PAST 24 HOURS (IN INCHES) 1 TEMPERATURE F MINIMUM 55 MAXIMUM 75

WERE THERE ANY DELAYS IN WORK PROGRESS TODAY? No X Yes___ If Yes, Explain:

VERBAL INSTRUCTIONS GIVEN BY THE GOVERNMENT:

NONE

HAS ANYTHING DEVELOPED WHICH MIGHT LEAD TO A CHANGE ORDER OR CLAIM? No X Yes___ If Yes, Explain:

NOTE: Official notification of claim must be made to the Contracting Officer by seperate correspondence.

SAFETY INSPECTION/MEETINGS: Indicate inspections made, items inspected, deficiencies noted and corrective action taken.

Routine tail gate safety meeting conducted.

WERE THERE ANY LOST TIME ACCIDENTS THIS DATE? No X Yes___ If Yes, attach accident report.

PRIME CONTRACTOR/SUBCONTRACTOR WORKFORCE
(If space provided below is inadequate, use additional sheets)

No.	TRADE	HOURS	EMPLOYER	No.	TRADE	HOURS	EMPLOYER
1	QC	8	ECC				
1	SUXOS	8	ECC				
1	UXOS	8	ECC				
2	CHEMIST	16	ECC				

CUMULATIVE TOTAL HOURS OF WORK HOURS FROM PREVIOUS REPORT 248

TOTAL WORK HOURS ON JOB SITE THIS DATE 40

TOTAL WORK HOURS FROM START OF CONSTRUCTION 288

MAJOR ITEMS OF EQUIPMENT

TYPE/CAPACITY	No.	STANDBY HOURS	OPERATING HOURS
NONE			

9. THREE PHASE INSPECTION

ADVANCE NOTICE OF PREPARATORY, INITIAL OR FINAL FOLLOW-UP INSPECTION: (minimum five working days notice required)

PREPARATORY INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Preparatory Checklist.

INITIAL INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Initial Checklist.

FINAL FOLLOW-UP INSPECTION HELD TODAY: Indicate NAS Activity Number. Attach Final Follow-up Checklist.

10. ACTIVITIES IN PROGRESS: Attach daily QCC follow-up inspection deficiencies/corrections noted.

ACTIVITY NUMBER	S=START C=CONTINUING F=FINISH	DESCRIPTION OF WORK ACTUALLY PERFORMED/MAJOR MATERIAL DELIVERIES TODAY
1	F	The following samples were collected. - 155 MM / HE RAP - ATK C995 - SMAW, HE - 60MM WP - 155 MM WP Cartridge 9MM Ball cartridge collected from DEMO office.

11. QCC TESTING

ACTIVITY NUMBER	DESCRIPTION OF TESTS PERFORMED	PASSED/FAILED
	N/A	

12. USER SCHOOLING CONDUCTED:

ACTIVITY NUMBER	DESCRIPTION OF SCHOOLING
	N/A

13. INSTALLED PROPERTY PRICING DATA ATTACHED: YES___ NO X

14. TRANSFERRED PROPERTY, DD-1149 ATTACHED: YES___ NO X

15. QA COMMENTS CORRECTED TODAY: YES___ NO X

16. EQUIPMENT SAFETY CHECKLIST ATTACHED: YES___ NO X

GENERAL COMMENTS:

Total of 31 samples collected plus 3 QC samples and 1 rinsate sample. 18 samples shipped for sampling.

CONTRACTOR CERTIFICATION: On behalf of the contractor, I certify that this report is complete and correct and all equipment and material used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as noted above.

Authorized Contractor Representative _____

Report Date: 11/18/96 [illegible] 11/19/96

CONTRACTOR QUALITY CONTROL REPORT

REPORT NO. C08

DATE 11/19/98

PROJECT/CONTRACT NUMBER 29 PALMS, MCAGCC DACW05-95-D-0014

SUPERINTENDENT BILL WALENIUS

CONTRACTOR ECC

WEATHER SUNNY

PRECIPITATION PAST 24 HOURS (IN INCHES) 1 TEMPERATURE F MINIMUM 55 MAXIMUM 75

WERE THERE ANY DELAYS IN WORK PROGRESS TODAY? No X Yes___ If Yes, Explain:

VERBAL INSTRUCTIONS GIVEN BY THE GOVERNMENT:

NONE

HAS ANYTHING DEVELOPED WHICH MIGHT LEAD TO A CHANGE ORDER OR CLAIM? No X Yes___ If Yes, Explain:

NOTE: Official notification of claim must be made to the Contracting Officer by seperate correspondence.

SAFETY INSPECTION/MEETINGS: Indicate inspections made, items inspected, deficiencies noted and corrective action taken.

Routine tail gate safety meeting conducted.

WERE THERE ANY LOST TIME ACCIDENTS THIS DATE? No X Yes___ If Yes, attach accident report.

PRIME CONTRACTOR/SUBCONTRACTOR WORKFORCE
(If space provided below is inadequate, use additional sheets)

No.	TRADE	HOURS	EMPLOYER	No.	TRADE	HOURS	EMPLOYER
1	QC	8	ECC				
1	SUXOS	8	ECC				
1	UXOS	8	ECC				
2	CHEMIST	16	ECC				

CUMULATIVE TOTAL HOURS OF WORK HOURS FROM PREVIOUS REPORT 288

TOTAL WORK HOURS ON JOB SITE THIS DATE 40

TOTAL WORK HOURS FROM START OF CONSTRUCTION 328

MAJOR ITEMS OF EQUIPMENT

TYPE/CAPACITY	No.	STANDBY HOURS	OPERATING HOURS
NONE			

9. THREE PHASE INSPECTION

ADVANCE NOTICE OF PREPARATORY, INITIAL OR FINAL FOLLOW-UP INSPECTION: (minimum five working days notice required)

PREPARATORY INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Preparatory Checklist.

INITIAL INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Initial Checklist.

FINAL FOLLOW-UP INSPECTION HELD TODAY: Indicate NAS Activity Number. Attach Final Follow-up Checklist.

10. ACTIVITIES IN PROGRESS: Attach daily CQC follow-up inspection deficiencies/corrections noted.

ACTIVITY NUMBER	S=START C=CONTINUING F=FINISH	DESCRIPTION OF WORK ACTUALLY PERFORMED/MAJOR MATERIAL DELIVERIES TODAY
1	F	- Further cutting of samples accomplished throughout the day - samples prepared for shipping

11. CQC TESTING

ACTIVITY NUMBER	DESCRIPTION OF TESTS PERFORMED	PASSED/FAILED
	N/A	

12. USER SCHOOLING CONDUCTED:

ACTIVITY NUMBER	DESCRIPTION OF SCHOOLING
	N/A

13. INSTALLED PROPERTY PRICING DATA ATTACHED: YES___ NO X

14. TRANSFERRED PROPERTY, DD-1149 ATTACHED: YES___ NO X

15. QA COMMENTS CORRECTED TODAY: YES___ NO X

16. EQUIPMENT SAFETY CHECKLIST ATTACHED: YES___ NO X

GENERAL COMMENTS:

CONTRACTOR CERTIFICATION: On behalf of the contractor, I certify that this report is complete and correct and all equipment and material used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as noted above.

Authorized Contractor Representative: _____

Report Date: 11/19/98 Date Submitted to Government Representative 11/20/98

CONTRACTOR QUALITY CONTROL REPORT

REPORT NO. 009

DATE 11/20/98

PROJECT/CONTRACT NUMBER 29 PALMS. MCAGCC DACW05-95-D-0014

SUPERINTENDENT BILL NALEN-VS

CONTRACTOR ECC

WEATHER SUNNY

PRECIPITATION PAST 24 HOURS (IN INCHES) i TEMPERATURE F MINIMUM 55 MAXIMUM 75

WERE THERE ANY DELAYS IN WORK PROGRESS TODAY? No X Yes___ If Yes, Explain:

VERBAL INSTRUCTIONS GIVEN BY THE GOVERNMENT:

NONE

HAS ANYTHING DEVELOPED WHICH MIGHT LEAD TO A CHANGE ORDER OR CLAIM? No X Yes___ If Yes, Explain:

NOTE: Official notification of claim must be made to the Contracting Officer by seperate correspondence.

SAFETY INSPECTION/MEETINGS: Indicate inspections made, items inspected, deficiencies noted and corrective action taken.

Routine tail gate safety meeting conducted.

WERE THERE ANY LOST TIME ACCIDENTS THIS DATE? No X Yes___ If Yes, attach accident report.

PRIME CONTRACTOR/SUBCONTRACTOR WORKFORCE
(If space provided below is inadequate, use additional sheets)

No.	TRADE	HOURS	EMPLOYER	No.	TRADE	HOURS	EMPLOYER
1	QC	8	ECC				
1	SVXOS	8	ECC				
1	VXOS	8	ECC				
2	CHEMIST	16	ECC				

CUMULATIVE TOTAL HOURS OF WORK HOURS FROM PREVIOUS REPORT 328

TOTAL WORK HOURS ON JOB SITE THIS DATE 40

TOTAL WORK HOURS FROM START OF CONSTRUCTION 368

MAJOR ITEMS OF EQUIPMENT

TYPE/CAPACITY	No.	STANDBY HOURS	OPERATING HOURS
NONE			

9. THREE PHASE INSPECTION

ADVANCE NOTICE OF PREPARATORY, INITIAL OR FINAL FOLLOW-UP INSPECTION: (minimum five working days notice required)

PREPARATORY INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Preparatory Checklist.

INITIAL INSPECTION HELD TODAY: Indicate Definable Features of Work. Attach Initial Checklist.

FINAL FOLLOW-UP INSPECTION HELD TODAY: Indicate NAS Activity Number. Attach Final Follow-up Checklist.

10. ACTIVITIES IN PROGRESS: Attach daily CQC follow-up inspection deficiencies/corrections noted.

ACTIVITY NUMBER	S=START C=CONTINUING F=FINISH	DESCRIPTION OF WORK ACTUALLY PERFORMED/MAJOR MATERIAL DELIVERIES TODAY
1	F	- Final demobilization achieved.
		- Sampling items stored in designated location
		- Remaining tools and sampling equipment shipped back to Lakewood - ECC.

11. CQC TESTING

ACTIVITY NUMBER	DESCRIPTION OF TESTS PERFORMED	PASSED/FAILED
	N/A	

12. USER SCHOOLING CONDUCTED:

ACTIVITY NUMBER	DESCRIPTION OF SCHOOLING
	N/A

13. INSTALLED PROPERTY PRICING DATA ATTACHED: YES___ NO X

14. TRANSFERRED PROPERTY, DD-1149 ATTACHED: YES___ NO X

15. QA COMMENTS CORRECTED TODAY: YES___ NO X

16. EQUIPMENT SAFETY CHECKLIST ATTACHED: YES___ NO X

GENERAL COMMENTS:

CONTRACTOR CERTIFICATION: On behalf of the contractor, I certify that this report is complete and correct and all equipment and material used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as noted above.

Authorized Contractor Representative: _____

Report Date: 11/20/03 [illegible] 11/20/03

SAFETY INSPECTION LOG
OEW OPERATIONS
ENVIRONMENTAL CHEMICAL CORPORATION
UXO DIVISION

DATE: 10 Nov. 98	TIME: 12:00 PM
CONTRACT NUMBER: DACW05-95-D-0004	DELIVERY ORDER#: 014
LOCATION: 29 Palms	
WEATHER CONDITIONS: Clear Skys cool - 35/45°F Dry.	

I. AREAS INSPECTED (list by grid number, coordinates or description):

Vechicle Operations - All safety equipment on hand. No discrepancies noted

II. INSPECTION RESULTS: No Discrepancies noted

SAFETY INSPECTION LOG
OEW OPERATIONS
ENVIRONMENTAL CHEMICAL CORPORATION
UXO DIVISION

DATE: 11 Nov 98	TIME: 1330
CONTRACT NUMBER: DACW65-95-D-0014	DELIVERY ORDER#: 0004
LOCATION: 29 Palms.	
WEATHER CONDITIONS: Overcast, cool, intermitent Light rain	

I. AREAS INSPECTED (list by grid number, coordinates or description):

Sampling collection, cutting, packaging.

II. INSPECTION RESULTS:

Observed team collecting, cutting, and packaging 3 samples today. All operation went smoothly. No discrepancies were noted.

SAFETY INSPECTION LOG
OEW OPERATIONS
ENVIRONMENTAL CHEMICAL CORPORATION
UXO DIVISION

DATE: 12 Nov 98	TIME: 1430
CONTRACT NUMBER: DAAA09-95-D-0004	DELIVERY ORDER#: 14
LOCATION: USMC AGCS 29 Palms.	
WEATHER CONDITIONS: Clear skys, cool and dry.	

I. AREAS INSPECTED (list by grid number, coordinates or description):

Sampling collection activities, to include:
Tool use
Contamination control
Packaging
Marking and control of samples.

II. INSPECTION RESULTS:

No discrepancies noted. All required PPE is being used and team members are following good safety procedures.

SAFETY INSPECTION LOG
OEW OPERATIONS
ENVIRONMENTAL CHEMICAL CORPORATION
UXO DIVISION

DATE: 12 Nov 93	TIME: 1250
CONTRACT NUMBER: DACW60-95-D-0014	DELIVERY ORDER#: 14
LOCATION: 29 Palms USMC AGCC.	
WEATHER CONDITIONS: Warm, clear, Day.	

I. AREAS INSPECTED (list by grid number, coordinates or description):

Observed team collecting and handling AHE ordnance at the ASP. All personel were involved in the collation and handling of expended aircraft ordnance.

II. INSPECTION RESULTS:

No discrepancies were noted, The team handled all items with care, UXO personel insured ord items had fired and no explosive residue was present.

SAFETY INSPECTION LOG
OEW OPERATIONS
ENVIRONMENTAL CHEMICAL CORPORATION
UXO DIVISION

DATE: 16 Nov 98	TIME: 11:00
CONTRACT NUMBER: DAAA09-95-D-0014	DELIVERY ORDER#: - 14
LOCATION: 29 Palms AGCS Range 101	
WEATHER CONDITIONS: Clear, cool, dry.	

I. AREAS INSPECTED (list by grid number, coordinates or description):

Explosive operations, UXO Scrap, RANGE operations

II. INSPECTION RESULTS:

No discrepancies noted, all ECC personel followed USMC EOD SOP instructions, proper PPE was worn No Discrepancies were noted. USACE safety rep made no discrepancies noted

SAFETY INSPECTION LOG
OEW OPERATIONS
ENVIRONMENTAL CHEMICAL CORPORATION
UXO DIVISION

DATE: 17 Nov 98	TIME: 1008
CONTRACT NUMBER: DACW01-95-D-1014	DELIVERY ORDER#: 14
LOCATION: 29 Palms, ABCS, Range 101	
WEATHER CONDITIONS: Warm, clear skys, no wind.	

I. AREAS INSPECTED (list by grid number, coordinates or description):

Explosive operations, sampling techniques.

II. INSPECTION RESULTS: No discrepancies were noted, sifting and UXO flag gathering operations were very smooth.

SAFETY INSPECTION LOG
OEW OPERATIONS
ENVIRONMENTAL CHEMICAL CORPORATION
UXO DIVISION

DATE: 18 Nov 98	TIME: 1005 / 1100
CONTRACT NUMBER: DAACO5-95-D-0014	DELIVERY ORDER#: 14
LOCATION: 29 Palms USMC, AGCS Range 101	
WEATHER CONDITIONS: Warm clear sky. No wind.	

I. AREAS INSPECTED (list by grid number, coordinates or description):

Sampling gathering and Detector operations.

II. INSPECTION RESULTS:

There were no discrepancies noted. All equipment was checked prior to operations, all proper PPE was in use. And worn.