

**OPERATING PERMIT RENEWAL
U.S. ARMY GARRISON YUMA PROVING GROUND
MUNITIONS TREATMENT FACILITY
EPA I.D. NO. AZ5213820991**

This fact sheet was prepared in accordance with Arizona Administrative Code (A.A.C.) R18-8-271(E)(e) and R18-8-271(G). A fact sheet must accompany every Arizona Hazardous Waste Management Act (AHWMA) draft permit that the Arizona Department of Environmental Quality (ADEQ) has prepared that either raises major issues or involves a new facility. All references to A.A.C. hereafter refer to A.A.C. R18-8-260 et seq., made effective on September 30, 2016, which incorporates and/or modifies parts of Title 40 Code of Federal Regulations (CFR) Parts 260 et seq. (July 1, 2013 and January 31, 2014 Editions).

The Arizona Department of Environmental Quality (ADEQ) has prepared a draft hazardous waste permit for the Yuma Proving Ground (YPG), Munitions Treatment Facility (MTF), operated by U.S. Army Garrison Yuma (USAGY), or the "Permittee." The MTF currently operates pursuant to a hazardous waste permit issued on June 29, 2007. The draft permit would renew the hazardous waste permit and allow USAGY to treat hazardous waste at the MTF for an additional ten years.

FACILITY DESCRIPTION AND SITE HISTORY

The YPG base installation is approximately 40 km (25 miles) northeast by air from the downtown area of Yuma; approximately 288 km (180 miles) east of San Diego, California, and approximately 200 km (125 miles) southwest of Phoenix, Arizona.

USAGY is a military research and development facility focused on testing and validating new weapons systems and improving the operational effectiveness of the U.S. armed forces. The MTF plays a key support role as it is used for destruction of the unserviceable, outdated, or obsolete munitions generated at YPG.

USAGY uses open burning (OB) and open detonation (OD), together referred to as OB/OD, to treat (destroy) its unserviceable, outdated, or obsolete munitions. OB/OD is a means to demilitarize many explosive items, to decontaminate explosives from large metal objects, and to reduce most combustibles to a smaller volume. OB/OD as conducted at the MTF is the safest method currently available for effective destruction, decontamination, and treatment of explosives and explosive wastes.

The MTF is located on the Kofa firing range at YPG. The OB/OD units at the MTF are within a fenced and secured area, located in a remote part of the active Kofa firing range. The actual areas for the OB/OD units are described in the Public Land Survey System as Sections 30 and 31 of Township 5 South, Range 19 West, Gila and Salt River Base and Meridian.

The explosive ordnance treated at the MTF is categorized as reactive and ignitable hazardous waste. It includes Class A and B explosives (e.g., propellant, bomb and rocket fuzes, projectiles, missiles, bombs). The ordnance is treated in five OD pits and two OB pads.

The OB area consists of two burn pads, with stormwater retention basins attached, each with three burn pans (a total of six OB units). At present, one existing OB pad (Inactive South Burn Pad) has been designated as inactive and USAGY has begun closure activities on this unit.

The OD area consists of three locations. Two of the locations contain a pair of adjacent trenches designed to detonate waste ordnance; the third location is an on-ground detonation unit designated for specific types of munitions (a total of five OD units).

The MTF currently operates under the Arizona Hazardous Waste Management Act (AHWMA) Permit, issued by ADEQ with an EPA I.D. No. AZ5213820991. The Permit allows USAGY to treat certain reactive and ignitable hazardous wastes in accordance with hazardous waste regulations (A.A.C. R18-8-264 and 270 and 40 CFR 264 and 270). The facility does not store any hazardous waste on site longer than 90 days. USAGY does not operate any disposal units onsite.

TYPES AND QUANTITIES OF HAZARDOUS WASTES MANAGED AT THE FACILITY

Types of Hazardous Wastes Treated

The waste munitions managed at YPG are considered hazardous due to their characteristics of reactivity (D003) and ignitability (D001). Additional information on hazardous waste types may be found in Permit Sections III.B (Permitted and Prohibited Waste Identification), Permit Attachment 3 (Waste Analysis Plan), and in the federal hazardous waste rules at 40 CFR §261 Subpart C “Characteristics of Hazardous Wastes” and Subpart D “Lists of Hazardous Waste.”

Quantity of Hazardous Waste Treated

The maximum quantity of explosive waste treated per day at the OB units is 4,000 pounds net explosive weight (NEW). The maximum quantity of waste that can be treated annually at the OB units is 730,000 pounds NEW.

PERMIT DESCRIPTION AND STATEMENT OF BASIS

To ensure protection of human health and environment, the Permit includes: 1) restrictions on the quantity and types of explosives that can be detonated; 2) procedures to prevent hazards that include security procedures and inspection requirements; 3) a contingency plan to address emergencies; 4) recordkeeping and reporting requirements; 5) personnel training requirements for explosive ordnance disposal; 6) a closure plan; 7) groundwater monitoring requirements.

The Permit consists of six parts and 15 appendices. All conditions were based on the Resource Conservation and Recovery Act (RCRA) Permit Application dated December 2016, as revised April, 2017, and the RCRA Facility Assessment (RFA) Report, prepared by EPA, and dated April 1999. The Permit will have a term of ten years.

Permit Part I contains general permit conditions. These conditions are required by Arizona Administrative Code (A.A.C.) R18-8-270.A and L, as well as Title 40 of the Code of Federal Regulations (CFR) 270.30.

Permit Part II contains general facility conditions. These conditions are required by A.A.C. R18-8-264.A and 40 CFR 270.32.

Permit Part III contains conditions relative to the management of the open burn units. This condition is based on the requirements of A.A.C. R18-8-264.A and 40 CFR 264, Subpart X.

Permit Part IV contains conditions relative to the management of the open detonation units. This condition is based on the requirements of A.A.C. R18-8-264.A and 40 CFR 264, Subpart X.

Permit Part V contains conditions relative to groundwater monitoring. Part V references the Groundwater Detection Monitoring Plan for the MTF, located in Permit Attachment 7. The Permittee is required to maintain two monitoring wells at the MTF, and on a biennial basis must monitor appropriate groundwater parameters and selected constituents of concern. These conditions are based on the requirements of A.A.C. R18-8-264.A and 40 CFR 264, Subpart F.

Permit Part VI contains conditions regarding corrective action. Corrective action is authorized by the Arizona Revised Statutes §49-922.B and Section 3004(u) of RCRA, as amended by the Hazardous and Solid Waste Amendments. The regulatory basis for corrective action can be found in A.A.C. R18-8-264.A and 40 CFR 264.101.

The purpose of the corrective action program is to assess and remedy, as needed, all existing Solid Waste Management Units (SWMUs) at YPG. The Permit defines a SWMU as “Any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. SWMUs include those units defined as “regulated units” (i.e., a surface impoundment, waste pile, land treatment unit, or landfill that received hazardous wastes after July 26, 1982) under RCRA, as well as other units which have generally been exempted from standards applicable to hazardous waste management units, such as recycling units and wastewater treatment units, and areas contaminated by “routine, systematic, and deliberate discharges” from process areas.” The SWMUs are identified in the RFA Report, prepared by EPA, dated April 1999.

The Permit also updates the lists of SWMUs found in Part VI.M of the Permit, pursuant to a Class 3 Permit Modification Request (C3 PMR) submitted by USAGY on October 20, 2015. It has been determined that five sites at YPG have been remediated at levels below the non-residential levels for all constituents of concern, and a determination of No Further Action (NFA) has been assigned. The five sites being assigned an NFA are:

Site ID	Description
SWMU 56 / YPG 006a	KOFA Burn-on-ground Area
SWMU 56 / YPG 006e	KOFA Abandoned South Burn Pad
SWMU 56 / YPG 006f	KOFA Abandoned North Burn Pad
SWMU 56 / YPG 006g	KOFA Trash Trench
SWMU 52 / YPG 44	KOFA Ammunition Deflagration Site

Additional information concerning investigation and remediation of these sites can be found in the submittal by USAGY: “Class 3 Permit Modification Request – Munitions Treatment Facility Permit – EPA ID No.: AZ5213830991 - September 2015.”

Director-Established Permit Conditions

As required by A.A.C. R18-8-270.A, M, N, and O (40 CFR 270.32), the Director has established site-specific permit conditions as necessary to conform with state and federal regulations, and to

protect human health and the environment. These conditions, known as Omnibus Conditions are as follows:

Permit Condition	Description of Change
I.I.1	<p>By October 1, 2017, the Permittee shall submit a Corrective Measures Implementation (CMI) Report for Inactive Landfills CCYPG-027, -029, and -141. The CMI Report shall describe all activities performed during construction, provide actual specifications and as-built drawings of the constructed or implemented remedy, and provide a preliminary assessment of CMI performance. The CMI Report shall include, but not be limited to, the following elements:</p> <ul style="list-style-type: none"> (a) A synopsis of the corrective measure and certification of the design and construction; (b) Explanation of any modifications to the approved construction and/or design plans and why these were necessary for the project; (c) Listing of the criteria, established in the approved CMI Workplan, for judging whether the corrective measure is functioning properly, and also explaining any modification to these criteria; (d) Certification by Arizona registrant(s) that the construction is complete, consistent with contract documents and the approved CMI design, and that the equipment performs to meet the intent of the specifications; (e) Results of facility monitoring, assessing the likelihood (and approximate time frame) that the corrective measures will meet the media clean-up standards, and any amendment thereto; and (f) Certification by the authorized signatory for the Permittee, in accordance with R18-8-270.A (40 CFR 270.11(d)). <p>The CMI Report shall include an executive summary of the corrective measures implementation, any daily inspection reports, inspection data sheets, problem identification and corrective measure reports, photographic reporting data sheets, sampling and analysis data, design engineers' acceptance reports, deviations from design and material specifications (with justifying documentation), and as-built drawings, unless otherwise agreed to by ADEQ.</p> <p>Following submittal of the CMI Report, the Director shall determine whether it has complied with the approved CMI Workplan, and may either approve or disapprove the CMI Report. If the Director disapproves the CMI Report, the Permittee shall be notified of the deficiencies, and a due date for submittal of a revised CMI Report shall be specified.</p> <p>Within 60 days of approval of the CMI Report for Inactive Landfills CCYPG-027, -029, and -141, the Permittee shall submit a Class 1 Permit Modification Request (C1 PMR) requiring Director approval in order to update Part VI of the Permit with a description of the final remedies, and the status for the units.</p>
I.I.2	<p>By January 1, 2018, the Permittee shall submit a closure report for the Inactive South Burn Pad. Following submittal of the closure report, the Director shall determine whether it has complied with the closure plan approved for the unit, and may either approve or disapprove the closure report. If the Director disapproves the closure report, the Permittee shall be notified of the deficiencies, and a due date for submittal of a revised closure report shall be specified.</p>

	<p>Within 90 days of approval of the closure report for the Inactive South Burn Pad, the Permittee shall submit a C1 PMR, requiring Director approval in order to update Part VI of the Permit with the closure status for the unit.</p>
<p>I.I.3</p>	<p>By July 1, 2018, the Permittee shall submit for the Director’s approval an updated Air Quality Impact Analysis (AQIA) of OB/OD Operations. The updated AQIA shall include, as appropriate, updated Industrial Source Complex Modeling (or an approved alternate) for each hazardous waste treatment unit, updated emissions factors, and updated exposure analysis for any onsite and offsite human receptors that may be impacted by emissions from the OB/OD Operations.</p> <p>The AQIA shall be submitted as a C1 PMR, requiring Director approval. The Director shall determine whether the AQIA has complied with the requirements of R18-8-264.A (40 CFR 264.601(c), and may either approve or disapprove the AQIA. If the Director disapproves the AQIA, the Permittee shall be notified of the deficiencies, and a due date for submittal of a revised AQIA shall be specified.</p>
<p>I.I.4</p>	<p>By July 1, 2018, the Permittee shall submit a Corrective Measures Implementation (CMI) Report for Inactive Landfill CCYPG-178. The CMI Report shall describe all activities performed during construction, provide actual specifications and as-built drawings of the constructed or implemented remedy, and provide a preliminary assessment of CMI performance. The CMI Report shall include, but not be limited to, the following elements:</p> <ul style="list-style-type: none"> (a) A synopsis of the corrective measure and certification of the design and construction; (b) Explanation of any modifications to the approved construction and/or design plans and why these were necessary for the project; (c) Listing of the criteria, established in the approved CMI Workplan, for judging whether the corrective measure is functioning properly, and also explaining any modification to these criteria; (d) Certification by Arizona registrant(s) that the construction is complete, consistent with contract documents and the approved CMI design, and that the equipment performs to meet the intent of the specifications; (e) Results of facility monitoring, assessing the likelihood (and approximate time frame) that the corrective measures will meet the media clean-up standards, and any amendment thereto; and (f) Certification by the authorized signatory for the Permittee, in accordance with R18-8-270.A (40 CFR 270.11(d)). <p>The CMI Report shall include an executive summary of the corrective measures implementation, any daily inspection reports, inspection data sheets, problem identification and corrective measure reports, photographic reporting data sheets, sampling and analysis data, design engineers’ acceptance reports, deviations from design and material specifications (with justifying documentation), and as-built drawings, unless otherwise agreed to by ADEQ.</p> <p>Following submittal of the CMI Report, the Director shall determine whether it has complied with the approved CMI Workplan, and may either approve or disapprove the CMI Report. If the Director disapproves the CMI Report, the Permittee shall be notified</p>

	<p>of the deficiencies, and a due date for submittal of a revised CMI Report shall be specified.</p> <p>Within 60 days of approval of the CMI Report for Inactive Landfill CCYPG-178, the Permittee shall submit a C1 PMR requiring Director approval in order to update Part VI of the Permit with a description of the final remedy, and the status for the unit.</p>
<p>I.I.5</p>	<p>By January 1, 2019, the Permittee shall submit an updated RCRA Facility Investigation (RFI) Report for the former- Muggins Mountain OB/OD (Site ID YPG-035 A, B, and C). The RFI Report shall provide updated descriptions of the procedures, methods, and results of all facility investigations of SWMUs and their releases, including information on the type and extent of contamination at the facility, sources and migration pathways, and actual or potential receptors. The RFI Report shall present all updated information to support corrective action decisions at the facility, and may include other reports as indicated below. The RFI Report shall be submitted as a C1 PMR, requiring Director approval.</p> <p>The Director shall determine whether the RFI Report fully details the objectives stated under Permit Condition VI.D "RFI Workplan", and then may either approve or disapprove the RFI Report. If the Director disapproves the RFI Report, the Permittee shall be notified of the deficiencies, and a due date for submittal of a revised RFI Report shall be specified.</p>
<p>I.I.6</p>	<p>Within 45 calendar days of approval of the updated RFI Report, the Permittee shall submit an updated Corrective Measures Study (CMS) Workplan for the Muggins Mountain Former OB/OD (Site ID YPG-035 A, B, and C). The updated CMS Workplan shall be submitted as a C1 PMR, requiring Director approval.</p> <p>The updated CMS Workplan shall provide the following information:</p> <ul style="list-style-type: none"> (a) A description of the general approach to investigating and evaluating potential remedies; (b) A description of the overall objectives of the study; (c) The specific plans for evaluating remedies to ensure compliance with remedy standards; (d) The schedules for conducting the study; and (e) The proposed format for the presentation of information.
<p>I.I.7</p>	<p>Within 60 calendar days of approval of the updated CMS Workplan, the Permittee shall submit an updated CMS Report for the Muggins Mountain Former OB/OD (Site ID YPG-035 A, B, and C). The updated CMS Workplan shall be submitted as a C1 PMR, requiring Director approval.</p> <p>The updated CMS Report shall summarize the results of the investigations for each remedy studied and of any bench-scale or pilot tests conducted. The CMS Report must include an evaluation of each remedial alternative. The CMS Report shall present all information gathered under the approved CMS Workplan. The CMS Report must contain adequate information to support the Director in the remedy selection decision-making process, described under Permit Condition VI.H. of this Permit.</p> <p>Following submittal of the CMS Report, the Director shall determine whether it has complied with the approved CMI Workplan, and may either approve or disapprove the CMS Report. If the Director disapproves the CMS Report, the Permittee shall be notified</p>

	of the deficiencies, and a due date for submittal of a revised CMS Report shall be specified.
I.I.8	<p>By January 1, 2020, the Permittee shall submit a post-closure plan (PCC) meeting the requirements of R18-8-264.A (40 CFR 264.118) for the former- Muggins Mountain OB/OD site (Site ID: YPG-035 A, B, and C). The PCC shall be submitted as a C1 PMR, requiring Director approval.</p> <p>Following submittal of the PCC, the Director shall determine whether it has complied with the requirements of 40 CFR 264.118, and may either approve or disapprove the PCC. If the Director disapproves the PCC, the Permittee shall be notified of the deficiencies, and a due date for submittal of a revised PCC shall be specified.</p>

VARIANCES REQUESTED BY THE PERMITTEE

None have been requested by the Permittee.

PUBLIC PARTICIPATION PROCESS - PROCEDURES FOR REACHING A FINAL DECISION ON THE PERMIT

The administrative record for the permit modification contains all data submitted by the Permittee. A copy of portions of the administrative record, including the draft modified permit is available for public review at:

Yuma County Library District - Main Library
2951 S. 21st Drive
Yuma, Arizona 85364

The hours of operation are Monday through Thursday: 9.00 a.m. – 9.00 p.m.; Friday and Saturday: 9.00 a.m. - 5.00 p.m. The library is closed on Sundays.

The full administrative record is available at:

ADEQ Records Center
1110 W. Washington Street, Phoenix, AZ 85007
(602) 771-4380

The hours of operation are Monday – Friday (excluding state holidays), 8:30 a.m. to 4:30 p.m. To arrange an appointment to review this record at ADEQ, contact the ADEQ Records Center at (602) 771-4380.

As required by A.A.C. R18-8-271.L and 40 CFR §124.13, all persons, including applicants, who believe any condition of the permit modification or the tentative decision to prepare and issue this permit modification is inappropriate, must raise all reasonably ascertainable issues and submit all reasonably available arguments and supporting materials by the close of the public comment period. All comments submitted during the public comment period shall discuss the appropriateness of the permit modification. **The 45-day public comment period will open on issuance of the public notice on April 25, 2017 and will close on June 9, 2017.** During the public comment period, any interested person may submit written comments on the draft permit. These comments and supporting materials must be submitted to ADEQ by the last day of the public comment period to:

Arizona Department of Environmental Quality
Anthony Leverock
Hazardous Waste Unit
1110 West Washington Street
Phoenix, Arizona 85007
email: acl@azdeq.gov

All written comments delivered or postmarked by the last day of the public comment period will be considered in ADEQ's final determination regarding the permit modification. After all comments have been considered, a final decision will be made by the Director. The Permittee, each person who has submitted written or oral comments, and each person who has so requested will receive a notice of this final decision. This notice shall include reference to procedures for appealing a decision on the permit modification request. The final decision shall become effective on the date specified in the notice.

At the time the final decision is made, the Director shall also issue a response to any significant comments. The response to comments shall consider all items as specified in A.A.C. R18-8-271.O and 40 CFR §124.17. The response to comments shall be made available to the public for review. Any person who desires to be placed on the mailing list for all future permitting activities for this facility or for facilities in a specific geographic area may request so in writing to the above address, pursuant to A.A.C. R18-8-271.I(c)(1)(ix) and 40 CFR §124.10(c)(1)(ix)(a).

In addition to submitting public comment, any person may request the Director to schedule a public hearing. **Written requests for a public hearing must be submitted to ADEQ by not later than close of the comment period, June 9, 2017 and must state the nature of the issues proposed to be raised in the hearing.** The Director will hold such a hearing if:

- He finds, on the basis of requests, a significant degree of public interest in the permit modification, or
- He finds that the hearing might clarify one or more issues involved in the permit modification decision, or
- A formal written notice of opposition to the permit modification is received within the comment period.

PERSON TO CONTACT FOR ADDITIONAL INFORMATION

For additional information concerning the draft permit, please contact:

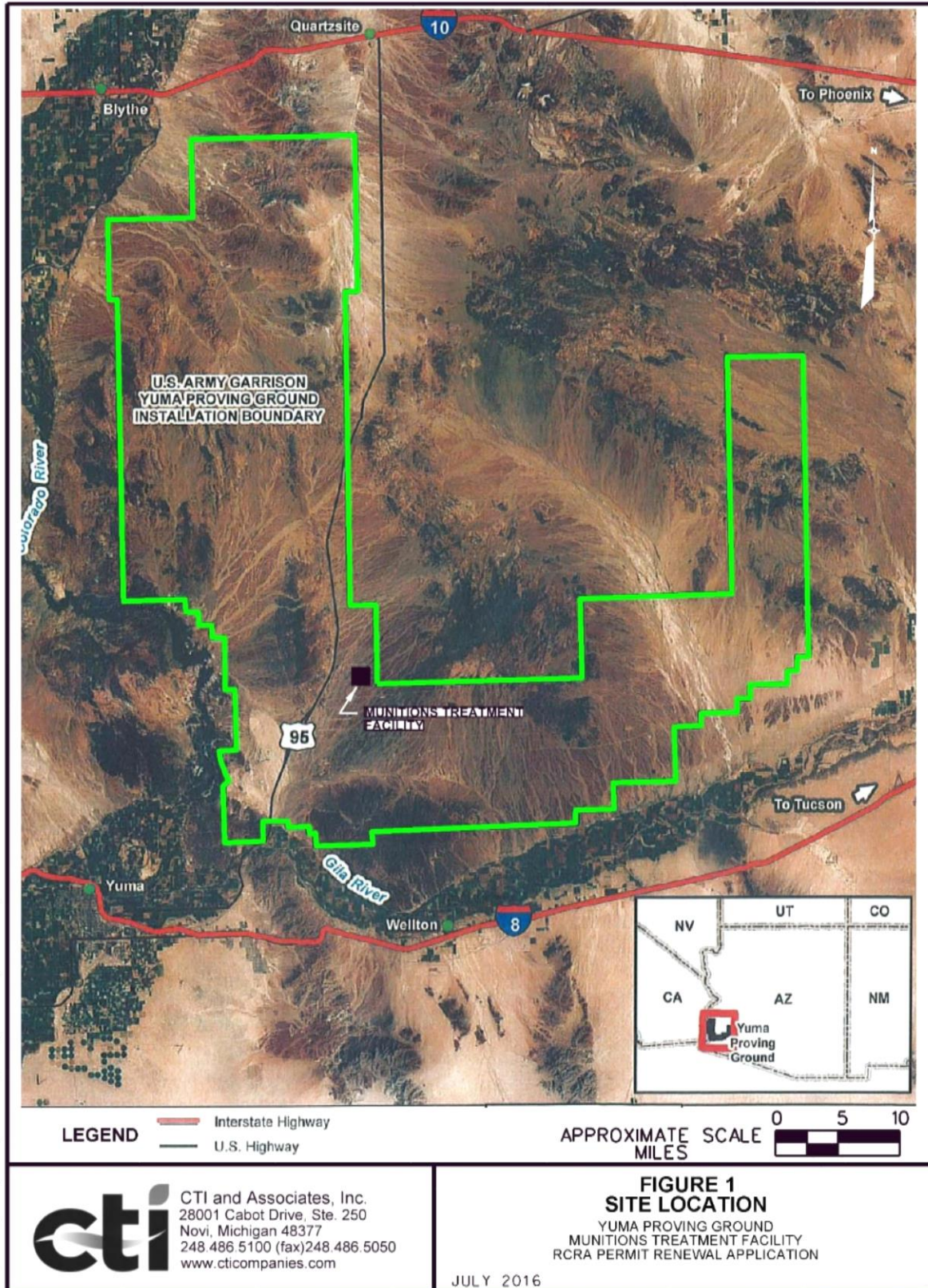
Anthony Leverock
ADEQ – Hazardous Waste Unit
1110 West Washington Street
Phoenix, Arizona 85007
E-mail: - acl@azdeq.gov
(602) 771-4160 or Toll Free 1-800-234-5677, extension 771-4160

Hearing-impaired individuals call our TDD line:
(602) 771-4829

Web site: www.azdeq.gov

Any person may request to be put on a mailing list for permit activity. You can make this request to the ADEQ contact person listed above.

Please bring this notice to the attention of anybody who might be interested in this matter.



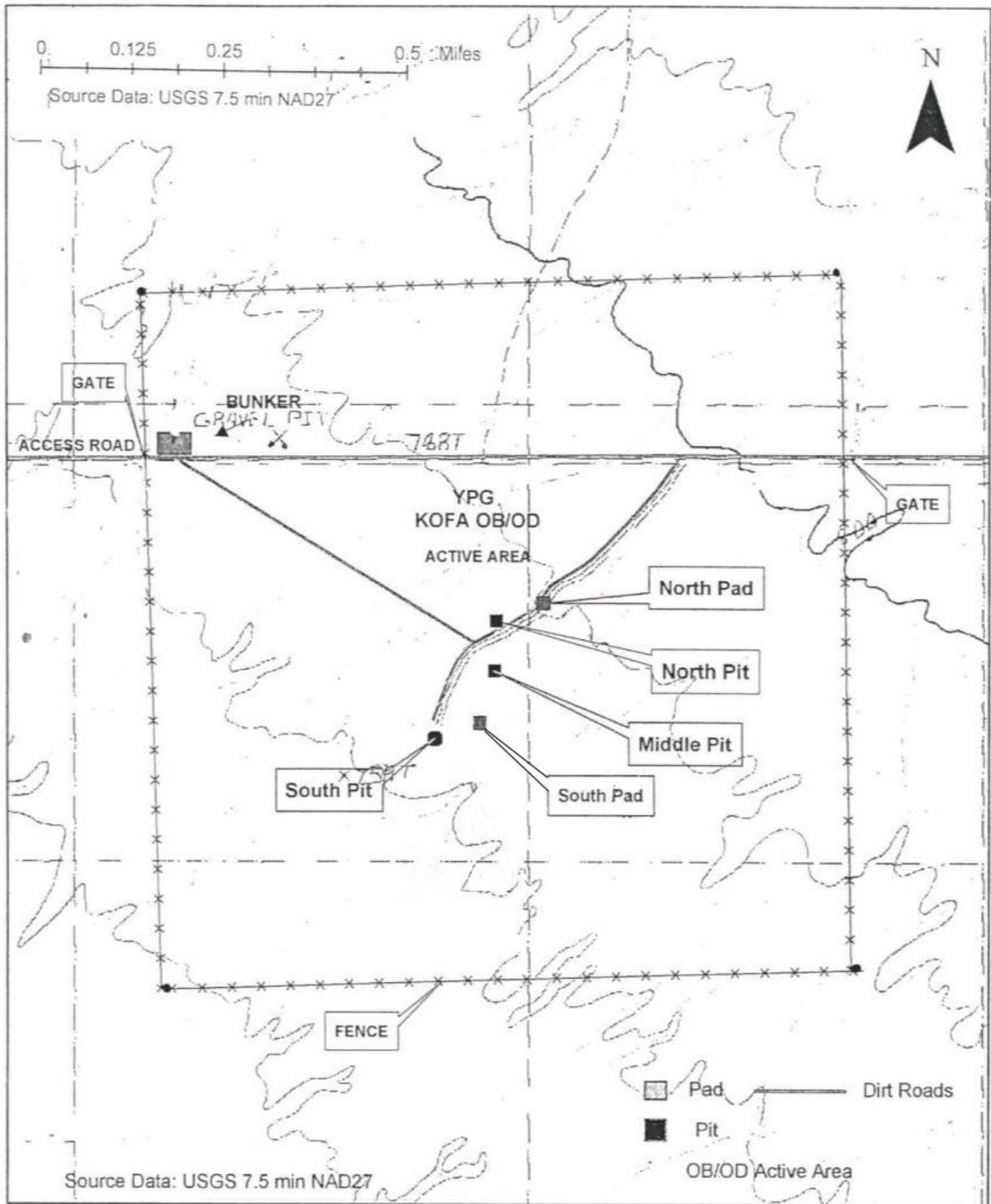


Figure 2
Munitions Treatment Facility