

**DRAFT HAZARDOUS WASTE FACILITY PERMIT
MUNITIONS TREATMENT RANGE
BARRY M. GOLDWATER RANGE – WEST
MARINE CORPS AIR STATION, YUMA
EPA I.D. NO. AZR 000 037 382**

This fact sheet was prepared in accordance with the 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 the A.A.C. hereafter refer to the A.A.C. R18-8-260 et seq., made effective on June 30, 2012, which incorporates and/or modifies parts of Title 40 Code of Federal Regulations (CFR) Parts 260 et seq. (July 1, 2006, and July 1, 2011 Editions).

The Arizona Department of Environmental Quality (ADEQ) has prepared a draft hazardous waste permit renewal for Marine Corps Air Station Yuma (MCAS Yuma). The draft permit proposes to allow MCAS Yuma to continue operating its Munitions Treatment Range (MTR) located on the western portion of the Barry M. Goldwater Range (BMGR) for 10 years. The MTR currently operates pursuant to a hazardous waste permit issued on June 25, 2004.

FACILITY DESCRIPTION AND SITE HISTORY

Barry M. Goldwater Range

Acquisition of the Barry M. Goldwater Range (BMGR) for military aviation training purposes began in 1941, shortly before the United States entered World War II. Congress officially set aside 2.6 million acres of the BMGR with the 1986 Military Lands Withdrawal Act (MLWA) and designated it the Barry M. Goldwater Air Force Range under management of the United States Air Force (USAF).

Congress extended authorization of the BMGR once more and re-designated BMGR management responsibilities with the 1999 MLWA. The BMGR is authorized for use by the Secretaries of the Air Force and Navy for 25 years until 2024 and provides that the United States Department of Defense (DoD) may apply for an extension to that authorization should there be a continuing military need for the BMGR beyond 2024.

The 1999 MLWA designates the western portion as BMGR-West (Yuma Segment), consisting of 1,017,990 acres with about 186 miles of exterior perimeter, and the eastern portion of the range as BMGR-East (Gila Bend Segment), consisting of a 1,651,235-acre parcel with approximately 280 miles of exterior perimeter.

The airspace over the Gila Bend Segment belongs to, and is controlled by, the USAF, while the Yuma Segment belongs to and is controlled by the United States Department of the Navy (Navy). Ground access to these segments is also controlled by the agency controlling the

overlying airspace. Control by the Navy is administered through MCAS Yuma; Luke Air Force Base (LAFB) administers USAF control.

Munitions Treatment Range

Proper management of spent munitions associated with weapons delivery training at the BMGR requires Combined Explosive Ordnance Disposal Unit (CEODU) personnel to periodically clean the sub-ranges and properly dispose of munitions residue. Munitions residue is the inert remains of a munition after it has functioned as designed or has been demilitarized by being subjected to explosive ordnance disposal demilitarization procedures. The processes used by MCAS Yuma CEODU personnel at the MTR include open detonation (OD) of explosive ordnance.

Ordnance disposal occurs in two ways on the BMGR. One procedure is known as target and range clearing. This activity may involve detonation-in-place of ordnance at locations throughout the BMGR with subsequent recycling of inert scrap metal. Clearing munitions from target areas is a necessary adjunct to proper management of ordnance delivery training. In the past, scrap metal collected during range clearing operations was buried on the range. These disposal locations are considered to be solid waste management units (SWMUs) by ADEQ. Sample data from several of these burial sites including SWMU 11 in the Yuma Segment show that wastes and soil within these burial pits is non-hazardous. Currently, inert scrap metal is removed from the BMGR during clearing operations and recycled.

The second disposal activity performed on the BMGR involves OD of ordnance at the MTR. Demilitarization of unserviceable, outdated, or obsolete munitions is part of proper munitions stockpile management. In addition to treating ordnance stockpiled at MCAS Yuma, the MTR is used to treat ordnance and explosive end items from other military bases and bombing ranges, from local government-owned manufacturing facilities, and from local manufacturers under contract to the U.S. government located in Arizona and California. No explosives are received from private industry for disposal.

The MTR, accessed by an unimproved road approximately one-mile long, consists of a reserved area, 1,000 meters on each side, located approximately three miles inside the western boundary of BMGR. Three-strand barbed wire and razor wire coils surround the perimeter of the MTR. The access road divides the MTR into east and west portions (see Figure 2). Since 1998, no MTR treatment activities have been conducted in the west portion of the MTR.

Structures within the MTR are shown in Figure 3. The former open burn (OB) area is located in the northwest corner of the MTR and consists of clean-closed OB trenches formerly used for small caliber munitions. The trenches were clean closed during 1998 in accordance with federal and state regulations (CDM 2001). A former munition wash area (for pink water treatment) was located just south of the former OB area. The munitions wash area operations ceased and the area was disassembled when the OB area was closed. A proposed munition wash area (called “pink water treatment”) in the southwest corner of the MTR was assembled, but never used. This area will remain closed and will not be used for munitions treatment.

The OD area encompasses the east portion of the MTR (east of the access road). Currently, there are two (2) main OD areas designated for Class A and B explosives and the white phosphorous detonation area. Each OD area includes several shot-holes or pits. The shot-holes are created by the detonation of unexploded ordnance. The detonation of a bomb creates a pit and subsequent detonation of bombs increases the pit radius and depth. The detonation pits are inspected weekly, after each detonation, and after storm events or high winds. The pits are inspected for integrity, depth and metal fragments (kickouts). If an inspection indicates a detonation pit is unusable, it is abandoned, not repaired. When the pit becomes too deep (i.e., it is unsafe to roll a bomb into, 10 feet or deeper) the pit is backfilled and a new detonation pit/shot-hole is developed.

The MTR has been permitted since 2004 to serve as a hazardous waste treatment facility; it is not permitted to store any hazardous wastes on site. MCAS Yuma has applied for renewal of its hazardous waste facility permit in order to continue its current operations.

TYPES AND QUANTITIES OF HAZARDOUS WASTES MANAGED AT THE FACILITY

Types of Hazardous Wastes

The MTR treats a wide range of munitions including bombs, fuzes, IEDs, and projectiles. Munitions wastes are considered hazardous due to their characteristics of reactivity (D003) and ignitability (D001) pursuant to 40 CFR §261 Subparts C and D. More specific information on hazardous waste types can be found in Permit Sections III.B (Permitted and Prohibited Waste Identification), Permit Attachment B (Waste Analysis Plan), and 40 CFR §261 Subpart C “Characteristics of Hazardous Wastes” and Subpart D “List of Hazardous Wastes.”

Quantities of Hazardous Waste Stored and Treated

The maximum quantity of explosive waste treated in a single event at the MTR is 3,000 pounds net explosive weight (NEW). The maximum quantity of waste that can be treated annually is 72,000 pounds NEW.

PERMIT DESCRIPTION AND STATEMENT OF BASIS

The draft permit renewal authorizes MCAS Yuma to continue to treat hazardous waste for a term of 10 years. At the end of the term, MCAS Yuma must either apply for another permit renewal, or it must close its hazardous waste treatment facility.

The draft permit consists of five parts and 11 attachments. All conditions are based on the Hazardous Waste Facility Permit Renewal Application dated December 17, 2013, with additional information and revisions provided by the applicant through November 3, 2014.

Permit Part I contains general permit conditions. These conditions are required by A.A.C. R18-8-261(A), A.A.C. R18-8-264(A) and (G), A.A.C. R18-8-270(A) and (G), A.A.C. R18-8-270 (K), A.A.C. R18-8-270 (L), A.A.C. R18-8-271, 40 CFR § 261, 40 CFR § 264, and 40 CFR § 270.

Permit Part II contains general facility conditions. These conditions are required by A.A.C. R18-8-262(A), A.A.C. R18-8-264(A), A.A.C. R18-8-268(A), A.A.C. R18-8-270(A) and (N), 40 CFR § 261, 40 CFR § 262, 40 CFR § 264, 40 CFR § 268, and 40 CFR § 270.

Permit Part III contains specific conditions related to each waste management area at the facility. These conditions are required by A.A.C. R18-8-264(A) and 40 CFR § 264. In addition, ADEQ has included the following permit conditions to this Part:

- III.B.2 – The permit condition prohibits treatment of waste that is not identified in Section I. Examples of prohibited wastes include:
 - (i) Infectious wastes, lethal or incapacitating chemical and biological munitions and their residues.
 - (ii) Wastes that cannot be detonated (e.g. Class C wastes).
 - (iii) Liquid or semi-liquid waste even if it is Class A or B explosive or White Phosphorus.
 - (iv) Bullets less than 50 caliber.
 - (v) Detonators, small arms munitions, cartridge activated devices, flares, shipping containers, and ordnance packing materials.
- III.C.2 - The OD pit shall be backfilled after it becomes too deep only after sampling and analysis of the soil in the pit shows that the contaminants of concern are below non-residential Soil Remediation Levels and Groundwater Protection Levels.
- III.C.3 - Operations shall be conducted only when the weather forecast states that there is no possibility of rain or thunderstorms.
- III.C.5 - Material sent for recycling (e.g., scrap metal) will not have any hazardous waste associated with it.
- III.C.6 - Operations shall only be conducted during daylight hours. Smoking shall not be allowed at the MTR. Only non-sparking tools will be used.

Permit Part IV contains standard conditions regarding corrective action for Solid Waste Management Units (SWMUs). MCAS Yuma completed all mandatory investigations and cleanups; however, if any new releases occur or if ADEQ becomes aware of new information concerning historic releases, MCAS Yuma could be required to perform additional investigations and cleanups, and incorporate reports from the investigations into the permit. The regulatory bases for corrective actions are found in A.A.C. R18-8-264(A) and 40 CFR 264.101 (Corrective Action for Solid Waste Management Units).

Permit Part V contains specific conditions related to groundwater monitoring. These conditions are required by A.A.C. R18-8-264.A and 40 CFR 264.100.

Permit Attachments

- Attachment A – Facility Description
- Attachment B – Waste Analysis Plan
- Attachment C – Process Information
- Attachment D – Groundwater Monitoring
- Attachment E – Procedures to Prevent Hazards
- Attachment F – Emergency Contingency Plan
- Attachment G – Personnel Training
- Attachment H – Closure Plan
- Attachment I – Recordkeeping and Reporting
- Attachment J – Corrective Action Schedule of Compliance –Approved Work Plans and Reports
- Attachment K – Arizona Administrative Code

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

1. Site Specific Groundwater Protection Levels (GPLs) - The permittee must establish site specific groundwater protection levels (GPLs) for constituents of concern (COCs):
 - a. Within 180 days after the effective date of the permit the permittee must perform sampling at the MTR so as to establish site-specific GPLs for perchlorate, RDX, and HMX;
 - b. Within 240 days after the effective date of the permit the permittee must submit a written report to ADEQ that calculates site-specific GPLs for perchlorate, RDX, and HMX. Upon approval by ADEQ these site-specific GPLs shall be designated as the remediation goals for these COCs.
 - c. On an annual basis, and prior to abandonment of an OD pit the permittee must perform annual sampling of soils within the pit, in accordance with their Soil Monitoring Plan, to evaluate whether soils contain concentrations of COCs above the site-specific GPLs. The permittee must remedy any soils above the remediation goals.
2. Groundwater Monitoring: The permittee must perform groundwater monitoring at the facility.
 - a. Within 90 days of permit issuance the permittee must commence quarterly groundwater sampling, in accordance with the Groundwater Monitoring Plan contained in Permit Attachment D.
 - b. Within 90 days of completion of each groundwater sampling event the permittee must submit a written Groundwater Monitoring Report to ADEQ.

APPLICANT REQUESTED VARIANCES

None have been requested by the applicant.

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

The administrative record for the draft permit contains all the data submitted by the applicant. A copy of the draft permit is available for public review at the Yuma County Library District - Main Branch, 2951 S. 21st Drive, Yuma, Arizona 85364, on Monday, Tuesday, Wednesday, Thursday: 9 a.m. - 9 p.m.; and Friday, Saturday: 9 a.m. - 5 p.m. The library is closed on Sundays.

The full administrative record is available at the ADEQ Phoenix office at 1110 W. Washington Street and may be viewed from 8:30 a.m. to 4:30 p.m., Monday – Friday (excluding state holidays). 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 draft permit or the tentative decision to renew the existing permit to MCAS Yuma is inappropriate, must raise all reasonable 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 draft permit.

The 45-day public comment period will open on issuance of the public notice on April 26, 2015 and will close on June 11, 2015. 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 – Manager
Permits and Plan Review 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 draft permit. After all comments have been considered, a final permit decision will be made by the Director. The applicant, each person who has submitted written or oral comments, and each person who has so requested will receive a notice of this final permit decision. This notice shall include reference to procedures for appealing a decision on a draft permit. The final permit decision shall become effective on the date specified in the final permit notice.

At the time that 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 11, 2015 and must state the nature of the issues proposed to be raised in the hearing.** The Director will hold such a hearing if:

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

PERSONS TO CONTACT FOR ADDITIONAL INFORMATION

For additional information concerning the draft permit, please contact:

Anthony Leverock – Manager
ADEQ - Permits and Plan Review 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.





