

CHAPTER 4

OPERATIONS OTHER THAN WAR

OVERVIEW

The primary focus for the Army is to fight and win the nation's wars. However, Army forces also function around the world in operations other than war. OOTW support US interests through the use of political and military actions that serve to deter war, resolve conflict, and promote peace.

OOTW happen in peace and conflict. EOD supports the five combat functions in OOTW both in the TO and in the CONUS. When planning and organizing EOD service, the following must be kept in mind: the available equipment and soldiers' skills, the area to be covered, and the degree of responsiveness needed. EOD has various tasks regularly performed in OOTW. Among these tasks are the following:

- Providing EOD support to the USSS and other federal agencies for presidential and VIP protection.
- Advising and assisting civil authorities in the removal of military ordnance that threatens public safety. See AR 75-15 for authorization information.
- Examining, identifying, and reporting new and unusual explosive ordnance for technical intelligence purposes.
- Supporting nuclear and chemical weapons shipments.
- Conducting range clearances. EOD supports range clearance operations by disposing of UXO on impact areas.
- Destroying ammunition. EOD personnel may help with unit training on demolition procedures for the destruction of ammunition. An EOD unit may also help with the routine destruction of special ammunition stocks in the absence of qualified ammunition personnel. It may help with emergency destruction of ammunition too, provided the tactical situation demands such measures to prevent capture of ammunition by the

enemy and there is a command decision that the EOD unit must help.

- Neutralizing government-owned ordnance shipments. If federal agencies or civil authorities ask for assistance in the interest of public safety, EOD technical assistance may be provided for the salvage, demolition, neutralization, or other disposition of government-owned shipments in transit. Approval for this support comes through command channels.
- Responding to IEDs. An EOD unit responds to devices or suspected devices when military or civilian law enforcement authorities request help with an incident that threatens public safety or when ordered to do so by the Army commander.
- Removing stuck rounds. For stuck rounds in artillery tubes and other large caliber weapons, the using unit must first do the downloading procedures stated in their technical manuals before requesting EOD assistance. When explosive methods are used by EOD personnel to remove stuck rounds, the EOD unit will not guarantee the weapon will be undamaged.
- Advising on mines and minefield clearance. Mines and minefield are not specifically an EOD matter. In addition, all troops must be able to apply land mine wartime techniques to counter enemy land mines. Even though all branches and services must clear land mines and booby traps. EOD personnel may give technical advice and assistance when asked and when priorities allow. Large-scale minefield breaching is an engineer function. The proliferation and advancing technology of area denial submunitions and scatterable mines complicate the issue. As a result, EOD and engineers must combine their skills and assets when the situation demands.
- Supporting the cleanup of UXO from formerly used defense sites and active installations. These cleanup operations are those conducted under the DERP. EOD support to these cleanup operations is required only when an item of UXO is deemed too hazardous to move or when it cannot be blown in place due to proximity of inhabited areas. In these instances EOD support is needed to render the UXO item safe so that it may be transported to a demolition range for disposal by the cleanup contractor. These cleanup

contractor personnel are normally ex-EOD personnel. They are authorized to perform normal detection, recovery, and disposal, but as civilian EOD technicians are not authorized to perform RSPs.

- Providing instruction to host or allied nation military or civilian EOD personnel on UXO hazards and disposal techniques.

EOD ROLE

EOD plays a major role in OOTW, during both periods of conflict and peace. During operations in both peacetime and conflict, EOD participates in security and advisory assistance, antiterrorism, counterdrug operations, training, ordnance disposal, arms control, treaty verification, and support to domestic civil authorities. Many of these roles are routinely performed within CONUS.

Compared to war, the threat to US forces is diminished during operations involving conflict. The EOD role during conflict is the same as in operations during war. During conflict, EOD may be engaged with an increased antiterrorism role, such as responding to the threat posed by IEDs.

COMMAND AND CONTROL

Command and control of the EOD function and EOD units depends upon their geographical location. The CONUS and OCONUS command and control structures are described below.

CONUS

Command and control of EOD units in the CONUS is exercised by FORSCOM through the 52d Ordnance Group (EOD). The group commands four EOD battalions which in turn command all EOD companies in CONUS. The structure is set up exactly as stated in Chapter 1. The group is designated to deploy to any MRC to support operations. As such, the 52d Ordnance Group (EOD) has defacto command of all EOD units worldwide.

OCONUS

Command and control of EOD units located OCONUS is through the respective MACOM that the units are assigned to. Under the MRC concept, HQDA has divided the world into three areas of most likely conflict. These areas can be associated

directly with three current JCS unified commands: MRC West in the PACOM, MRC East in CENTCOM, and MRC Europe in EUCOM. Ideally, each of these commands should have an EOD battalion assigned to the Army component command that supports them (Figure 1-2). The EOD units within the theater would then be placed under the command and control of this EOD battalion. The EOD battalion commander would act as the theater army EOD staff officer and ensure proper coordination with appropriate staff elements and commands.

To ensure ease of transition in wartime, each OCONUS MACOM should execute an MOU with FORSCOM and the 52d Ordnance Group (EOD) to ensure that standardized policies and procedures are followed worldwide. This should allow the OCONUS commands to maintain highly trained units that know how to fight under the wartime command.

Under this doctrine, OCONUS MACOMs retain the capability to provide EOD support for lesser regional contingencies and coordinate MRC response with organic EOD assets. Although a stovepipe command is not created, close ties with the warfighting command are established through an MOU.

IED INCIDENTS

The following paragraphs provide information on handling IED incidents in OOTW settings. Whether the incident is on an Army installation or off post in support of a local law enforcement agency, the principles remain the same.

Finding IEDs

When a bomb threat has been called in or is suspected, the building supervisor evacuates the area and coordinates search teams. Refer to FM 19-10 for threat and search procedures. The designated search teams for that building or area are responsible for searching for IEDs. Military police and EOD soldiers do NOT search for reported explosive devices in barracks, community areas, buildings, and offices. This is because they are not familiar with the area and its contents. The individual or group of individuals searching should work in that building and, if possible, have had training in systematic

search procedures. (The local EOD company can assist in providing search training.) The EOD company normally will not respond until a suspected bomb has actually been found.

Once the search teams find a suspected IED, they should not be touch or handle it in any way. The person in charge should contact the local civilian police if not on a military or federal installation. They will be responsible for contacting the military police who will, in turn, notify the nearest military EOD team. The search team leader should remain in the area so that EOD personnel can interview him upon their arrival.

Planning IED Operations

Once the incident is received, the commander or the company NCO will select a response team. This usually consists of a team leader and an assistant. More EOD assistants may be added if needed. Once the EOD response team arrives at the incident, it must be determined who is to be the incident-scene officer. In the Army, this normally is a command decision. The senior ranking person or his designated representative is in charge. If the incident is not on a military installation, the incident-scene officer can be the building security officer, the office manager, or anybody in authority. The individual designated as the incident-scene officer should have training in this subject area. The EOD team leader can provide technical information and advice to the incident-scene officer these matters.

Conducting Operations

When the EOD team arrives, they on all available information by the incident-scene commander or senior military police representative. The EOD team leader ensures that a complete and logical plan is developed according to guidance outlined in this manual and applicable EOD technical manuals. The EOD team leader coordinates with the area commander, military police, medical personnel, fire department, and engineers on matters concerning safety, command and control, and logistical needs. It is recommended that the PAO be notified so that he or she can respond to questions from the media.

Once the incident-scene officer coordinates with support personnel and the recommendations or

plan of attack is approved, EOD operations may begin. The EOD response team may make an attempt to use RSP or to move the item by remote means in accordance with current Army EOD publications. Since there is a chance during the RSP that the IED may detonate, there must be extensive coordination between the incident-scene commander, police, and the EOD team leader. In particular, the EOD team leader must include detonation in his plan and be prepared to minimize damage and casualties.

Police (military or civilian) will be needed to control the flow of personnel in and out of the hazard area. Their duties may include stopping traffic and clearing buildings within the hazard area. Police should provide a 360-degree security perimeter around the area at a distance of at least 300 meters initially (if possible). This fragmentation zone can be adjusted after the initial reconnaissance.

Once an IED has been rendered safe by the EOD technician, the responsible law enforcement agency may want all of the components associated with it. This agency is usually the military police or CID, if the item is on a federal installation.

FORMERLY USED DEFENSE SITES

As US military forces continue to downsize and installations close or revert to civilian use, more and more FUDSs will be identified. This presents a challenge to EOD now and in the future. Many FUDSs are being cleared by civilian contractors who are using EOD resources to dispose of ordnance items they find. The challenge to EOD is to handle both the day-to-day EOD mission and the increasing number of these FUDSs.

The EOD unit may be called on to handle any type of ordnance at a FUDS. Most of the ordnance that is found is old and may not be found in the 60-series TMs. Even if the ordnance is found in these publications, there may not be an RSP listed. The collective experience of the company will have to be used to handle these situations. Many of the FUDSs may contain chemical ordnance or suspected chemical ordnance. This makes the problem even more complicated because the EOD company is already dealing with an environmental problem. The EOD officer must have liaisons with the local environmental office, technical escort personnel, local PAO, local law enforcement, and local Army

command staff. The EOD company should remember that it is not just their problem. The entire community is interested in its resolution. The EOD officer must keep all concerned personnel informed of the operation and any problems that develop.

Cleanup of FUDSs will be with EOD for many years to come, so EOD must make the solution part of its day-to-day mission.

POSSE COMITATUS ACT

The Posse Comitatus Act defines dealing with civil authorities or the public when Army EOD assistance may involve civil law. United States Code (18 USC 1385 (1964)) states that: "Whoever, except in cases and under circumstances expressly authorized by the Constitution or Act of Congress, willfully uses any part of the Army or the Air Force as posse comitatus (authority of the country) or otherwise to execute the laws shall be fined not more than \$10,000 or imprisoned not more than 2 years, or both."

The term *execute the laws* includes conducting or assisting in criminal investigations or apprehending accused persons. The Posse Comitatus Act does not apply where such action is authorized by the Constitution or by an Act of Congress. The Posse Comitatus Act applies to EOD when the gathering of evidence is requested for the purposes of a criminal investigation. Generally, the act does not apply to EOD when a request regarding safety is involved (for example, for suspected IEDs and the recovery of hazardous items) as long as it is in the interest of public safety.

Under the Constitution and laws of the US, the protection of life and property and the maintenance of law and order within the territorial jurisdiction of any state are primarily the responsibilities of local and state governments. Authority to enforce the laws is vested in the authorities of those governments. This act does not apply in foreign countries. Congress has authorized a military justice system, the UCMJ, for the armed forces. Therefore, law enforcement actions within the UCMJ do not violate the Posse Comitatus Act. As a general principle therefore, Army personnel do not violate the act in the performance of properly authorized duties even if violation may indirectly or by chance aid federal, state, or local authorities.

DA policy regarding Army EOD use is to assist public safety and law enforcement agencies in developing a capability to deal with the IED threat and, when necessary, to provide EOD service in the interest of public safety. Army EOD personnel will not participate in bomb or IED search operations (except for VIP support operations) or assist in the enforcement of civil law. The normal response by US Army EOD to federal, state, and local requests for EOD service is based on the protection of public safety. Because of the nature of an IED threat, the EOD service response must be efficient and immediate to protect public safety effectively. US Army EOD personnel will respond to such requests when a suspected or actual device has been located and when the responsible agency has no EOD capability or its capability is overextended. They may function as technical consultants or advisors and assist in or perform disposal of hazardous residue. Under emergency conditions, EOD may attempt an RSP (in accordance with AR 75-15). For a particular situation, the advice and assistance of a legal officer are necessary.

EPA AND OSHA CONSIDERATIONS IN EOD

Many federal, state/local, and host-nation laws now hold commanders legally responsible for environmental damage caused by inadequate planning or supervision of operations or training. This could mean fines and/or imprisonment if convicted of environmental violations.

To avoid adverse environmental impact when planning or executing operations, refer to TC 5-400 and the *Commander's Guide to Environmental Management*. Also, be familiar with the provisions and requirements of ARs 200-1 and 200-2.

Many EOD operations, such as those involved in supporting civil authorities with IED response or conducting a post range clearance, present environmental and safety challenges. A general discussion of these is provided below. Specific questions on policy or regulations must be addressed to the appropriate specific agency.

In today's changing world, protection of the environment has become a top priority. In the daily performance of EOD duties, EOD soldiers are asked

to eliminate hazards in the community. In the removal of these hazards, EOD teams may violate environmental protection laws. This applies whether the military ordnance is picked up and taken to a safe holding area or it is disposed of on site.

It is vital that EOD soldiers understand the environmental protection laws of the area they are working in. There are federal as well as state laws that must be met. The individual soldier may be held responsible for his actions under these laws. This means that the individual soldier may be fined and serve time in prison for environmental law violations. Many of the actions that EOD took a few years ago are now questionable or illegal under EPA rules and regulations.

During peacetime, there are two difficult challenges that EOD units must face. One is to protect the environment while performing the EOD mission. The other is to follow OSHA rules and regulations.

Environmental Protection and Compliance Policy

This section defines Army policy and procedures for complying with the RCRA (42 USC 3251, 21 Oct 76), DOD Directive 7310.1, and AR 200-1. Section 6001 of the RCRA states the following: "Each department of the Federal Government . . . engaged in any activity resulting in the disposal or management of solid or hazardous waste shall be subject to, and comply with, all federal, state, interstate, and local requirements, both substantive and procedural (including any requirements for permits and reporting)."

This section helps explain the requirements for complying with the federal requirements of the RCRA and the OSHA Act (29 CFR 1910.120 and 1200) as they apply to the management, handling, transportation, storage, and disposal of conventional explosive ordnance. AR 200-1, paragraph 6-2, states in part that all Army activities must "be fully aware of and comply with all applicable Federal, State, and local laws and regulations, both substantive and procedural, for generating, treating, storing, disposing, and transporting solid and hazardous waste, including the terms and conditions of State and Federal solid and hazardous waste permits and providing reports to Federal, State and local regulatory agencies."

RCRA Compliance

40 CFR 270.1(c) states that a RCRA permit is required for the owners and operators of any facility for the "treatment, storage, and disposal" of any solid or hazardous waste. The definitions of solid and hazardous waste are outlined in 40 CFR 270.2.

AR 200-1, paragraph 6-3, requires the installation commander to enter into compliance agreements and consent orders to achieve RCRA compliance. Army installations will obtain a RCRA permit to treat, store, and dispose of solid and hazardous waste (paragraph 6-4d). The IC will be considered the hazardous waste generator as defined in 40 CFR 260.10 for the purposes of signing RCRA reports and records and for getting an EPA identification number as outlined in 40 CFR 262.12 (paragraph 1-25.f(7)).

All personnel involved in solid or hazardous waste operations or activities must be trained IAW 40 CFR 264.16 and 29 CFR 1910.120. This training must be documented and updated at least annually, unless otherwise stated as part of the RCRA permit. Currently, IAW the guidance from DA Office for Environment, Safety, and Occupational Health, completion of EOD school meets the requirements of 40 CFR 264.16 and 29 CFR 1910.120.

Under RCRA, a generator of a hazardous waste is responsible for that waste from its "cradle to its grave." A generator, as defined in 40 CFR 260.10, is "any person whose act or process produces hazardous waste identified or listed in 40 CFR 261, or whose act first causes a hazardous waste to become subject to regulation."

In accordance with DA policy and guidance of 1 November 1993, all generation, transportation, storage, treatment, or disposal of conventional explosive ordnance designated as hazardous waste is subject to RCRA requirements. Conventional explosive ordnance will be considered hazardous waste under the following conditions:

- An authorized official records in writing a determination that the conventional explosive ordnance will be discarded; **and**
- Custodians of the conventional explosive ordnance receive this written determination--that the

conventional explosive ordnance is to be discarded and, therefore, subject to RCRA regulation.

NOTE: Prior written authorization is not required if safety or other considerations preclude getting such. Examples are an emergency response conducted by an EOD unit and a response to mitigate an immediate hazard.

The authorized official must take into consideration the facts and circumstances applicable to each situation in making a determination to discard. The following guidelines should be used in making this determination:

- **First**, a determination to discard excess conventional explosive material that is safe and stable in normal logistical environments by military standards may be made only after all efforts have been exhausted to reuse, recycle, recover, or sell such material.

- **Second**, a determination to discard conventional explosive ordnance that may be unsafe or unstable to store or transport should be made by an authorized official after conducting appropriate testing or inspection, if conditions allow, or if it is readily apparent that there is no reasonable alternative to discarding the material.

Generally, conventional explosive ordnance manufacture, assembly, testing, training, intended use, or range management do NOT constitute hazardous waste as regulated by RCRA. However, some wastes generated by these operations may be subject to RCRA regulations.

According to the above guidance, conventional explosive ordnance that is safe for transportation and has not been classified as a hazardous waste can be transported according to DOT and DA guidelines.

In accordance with RCRA regulations (40 CFR 261.3(c)(1)), once a waste has been identified as a solid or hazardous waste, it will remain a hazardous waste until--

- It no longer exhibits a hazardous waste characteristic as described in 40 CFR 261, Subpart C.

or

- It has been specifically excluded by regulation (such as being delisted).

Section 2692 of Public Law 98-407 (10 USC 2692) states:

a. (1) Except as otherwise provided in this section, the Secretary of Defense may not permit the use of an installation of the Department of Defense for the storage or disposal of any material that is toxic or hazardous material and that is not owned by the Department of Defense.

(2) The Secretary of Defense shall define by regulation what materials are hazardous or toxic for the purpose of this section, including specifications of the quantity of a material that serves to make it hazardous or toxic for the purposes of this section. The definition shall include materials referred to in section 101 (14) of the CERCLA of 1980 (42 USC 9601(14)) and materials designated under Section 102 of the Act (42 USC 9602) and shall include materials that are of an explosive, flammable, or pyrotechnic nature.

b. Subsection a. does not apply to the following:

(1) The temporary storage or disposal of explosives in order to protect the public or to assist agencies responsible for federal law enforcement in storing or disposing of explosives when no alternative solution is available, if such storage and disposal is made per an agreement between the Secretary of Defense and the head of the federal agency concerned.

(2) The temporary storage or disposal of explosives in order to provide emergency lifesaving assistance to civil authorities.

Permit and Record Keeping Requirements

Army installations that generate, transport, treat, store, or dispose of solid or hazardous wastes as described in 40 CFR 261, Subpart C, must apply to local, state, or federal regulatory agencies for an EPA identification number as described in 40 CFR Parts 262, 263, 264, or 265, depending on installation requirements.

In accordance with AR 200-1, the installation commander submits any requests for permits required for the installation.

An EOD unit that uses a specific range for disposing of ammunition and explosives, explosive

residue, or ordnance that has been classified as hazardous waste must have a thermal treatment facility permit IAW Subpart P, 40 CFR 265.370-383, Section 382, which covers open burning/open detonation of explosive material and residue.

EOD units must submit the required information to the installation commander or his designated representative for completion of the Subpart X permit process. This information includes all material that is used on the EOD demolition range.

The installation will be required to submit certain reports and keep certain records IAW 40 CFR. The following reports are required for installations that are permitted on-site treatment, storage, or disposal: Biennial Report (40 CFR 265.75) and additional reports as noted in 40 CFR 265.77.

The installation is also required to keep an operating record as described in 40 CFR 265.73. This record must be kept for as long as the facility is licensed and operating. The EOD incident reports (DA Form 3265-R) on any regulated solid or hazardous waste as defined in DA guidance are considered part of the operating record. These incident reports, or at least copies of them, must be maintained as official records and handled IAW file number 200-1c, Hazardous Material Management Files, as prescribed in AR 25-400-2.

Explosive Ordnance Disposal Operations

The following policy and guidance was set forth by Headquarters, Department of the Army, on 1 November 1993. This policy supersedes paragraph 6-7, AR 200-1, and is in effect until issuance of a unified DOD policy or promulgation of the munitions regulations required under the Federal Facilities Compliance Act. This guidance does not supersede any local or state requirements that may apply to any installation. The EOD unit should coordinate with state and local agencies through the installation environmental office. An MOU should be prepared for all local and state agencies. A sample (Figure 4-5, page 4-12) is provided at the end of this chapter.

Generally speaking, EOD personnel conduct emergency response operations to protect life and property and to return military conventional

ordnance discovered off-installation to DOD control. The EOD emergency response actions include on- and off-site treatment and transportation as necessary to minimize the immediate threat. For example, if conventional explosive ordnance is discovered at a civilian site, EOD personnel would provide support to the civil authorities off-installation and also to on-installation authorities if or when the conventional ordnance is returned to the DOD facility.

EOD emergency response actions required to minimize an immediate safety threat to personnel or property are specifically excluded from the standards and requirements IAW 40 CFR 264.1(g)(8) and 270.1(c)(3).

Some state and local environmental regulations may require an emergency interim permit for transportation or thermal treatment of conventional explosive ordnance that does not present an immediate threat to human life or property. The guidelines for this permit are in 40 CFR 270.61. The agency requesting EOD support is required to get whatever permits are required.

For **on-installation** emergency response operations, EOD actions are those associated with a call for immediate action by EOD personnel or civilian munitions destroyers to render safe conventional explosive ordnance. These emergency actions might involve destruction of the conventional ordnance in-place or removal to a safer location. For example, an item of explosive ordnance may be so damaged because of an accident or normal use that it poses an imminent threat to life, property, or the environment. In these cases, EOD units often respond to render assistance in mitigating the threat.

On-installation emergency actions include the treatment and transportation necessary to minimize immediate threats to human health and the environment. On-installation emergency actions to contain or treat conventional explosive ordnance are not subject to the TSD standards or the permit requirements of RCRA regulations. Figure 4-1 (page 4-9) shows an on-installation response flowchart that indicates when RCRA regulations apply.

Response to any conventional ordnance item on an intended-purpose range can be treated in place without a permit and its requirements. If an item is not on an intended-purpose range, it should be

transported to a licensed EOD open burning or open detonation site. If it cannot be transported, an interim permit must be obtained for thermal treatment in place, IAW 40 CFR 270.61.

For **off-installation** response operations, EOD personnel may be called upon by federal or civil authorities to help with emergency responses involving conventional explosive ordnance off the military installation. These incidents may involve all types of conventional ordnance, including US and foreign military ordnance and IEDs.

Off-installation emergency actions include the treatment or containment activities needed to minimize immediate threats to human health and the environment. Off-installation emergency actions to treat or contain conventional explosive ordnance are not subject to the standards or permit requirements of RCRA regulations. The EOD team leader's determination of an emergency situation means the immediate response exception is in effect under 40 CFR Sections 264.1(g)(8) and 270.1(c)(3). Figure 4-2 shows an off-installation flowchart and indicates when RCRA regulations apply. If the conventional explosive ordnance is not safe for transportation but does not present an immediate danger to life or property, an interim permit is required for the transportation and treatment of the ordnance. If the local law enforcement agency has a licensed open burning or open detonation area for treating explosive material, that area should be used.

The authority or agency asking for help should notify the environmental protection authority of the emergency situation before the EOD unit arrives on scene. Notification and reporting required by the state or local regulatory authorities are the responsibility of the requesting agency. To the extent practical, EOD personnel should ensure that the authority or agency that requested assistance complied with applicable regulatory notification requirements.

Conventional explosive ordnance that is safe to transport IAW DOT and DOD regulations is not classified as a hazardous waste, and transportation is authorized for the purpose of returning the item to DOD control. Once back in DOD control, an authorized official must determine the final disposition IAW the RRDA guidelines.

EOD units that receive requests for assistance with the treatment or storage of non-DOD ordnance

or explosive items should refer to 10 USC 2692 or earlier portions of this section. A sample MOU for off-installation cooperation with civil authorities and environmental regulatory agencies is at the end of this chapter.

Demilitarization Operations

Demilitarization is a necessary step in the life cycle of the management of conventional explosive ordnance. Conventional explosive ordnance that may be demilitarized will be managed in the RRDA ammunition account. This account is an asset-tracking system that ensures the appropriate disposition considerations are made. Demilitarization is only one of those considerations.

Placement of conventional explosive ordnance into the RRDA does not mean that it will be demilitarized. This ordnance should be considered for use in such programs as domestic and foreign military sales, EOD training, RDTE missions, and installation recovery and recycling programs, or it should be reworked to meet original or modified specifications for reuse.

Conventional explosive ordnance in the RRDA that an authorized official has decided to discard is transferred to the BHW account for accounting and management purposes until treatment or disposal. All conventional explosive ordnance that is in the BHW account is subject to the regulatory requirements of RCRA for transportation, treatment, storage, and disposal. Figure 4-3 (page 4-10) shows a flowchart for demilitarization and indicates when RCRA regulations apply.

Storage

Sometimes it is necessary to hold temporarily recovered conventional explosive ordnance in storage for a purpose other than treatment. These situations include its use as evidence in law enforcement proceedings and accident investigations and technical evaluations by EOD technicians or RDTE personnel. Storage of non-DOD ordnance or explosive material for other federal or civil authorities is subject to 10 USC 2692 (refer to earlier portions of this chapter). After the conventional ordnance or explosive material is no longer to be stored for any reason, it will be evaluated by an authorized official on whether it is to be used or

discarded. If a decision is made to discard the material, it becomes subject to all RCRA regulations.

Storage of hazardous material is authorized for a period not to exceed 90 calendar days. Any storage past that time must be in a licensed and permitted storage area. Material stored in the EOD holding area should be treated as soon as possible after its accumulation.

Training and Testing

Specific training required to develop and maintain proficiency in the use of special EOD procedures, tools, and explosives is done at designated demolition training ranges, also referred to as EOD training areas. Except, for basic EOD training, the amounts of explosives used at these ranges are small. These training operations are not considered waste treatment. They represent the use of conventional explosive ordnance for its intended purpose and, therefore, are not subject to RCRA regulations.

EOD training can only be conducted on a EOD range that is licensed for thermal treatment. No ordnance can be transported to any other range and disposed of without having a permit for thermal treatment. This violates the intended purpose criteria for range areas.

Conventional explosive ordnance firing and explosive activities considered conventional explosive ordnance used for its intended purpose include the following: personnel training and proficiency maintenance, safety testing, RDTE, range clearance, and quality control. These activities are not considered waste treatment or disposal operations and are not subject to RCRA regulations.

During some artillery and mortar live fire training exercises, not all propellant charges or increments are used. Because excess propellants present a safety threat in real combat situations, their elimination by open burning is considered part of the training exercise and is, therefore, not subject to RCRA regulations.

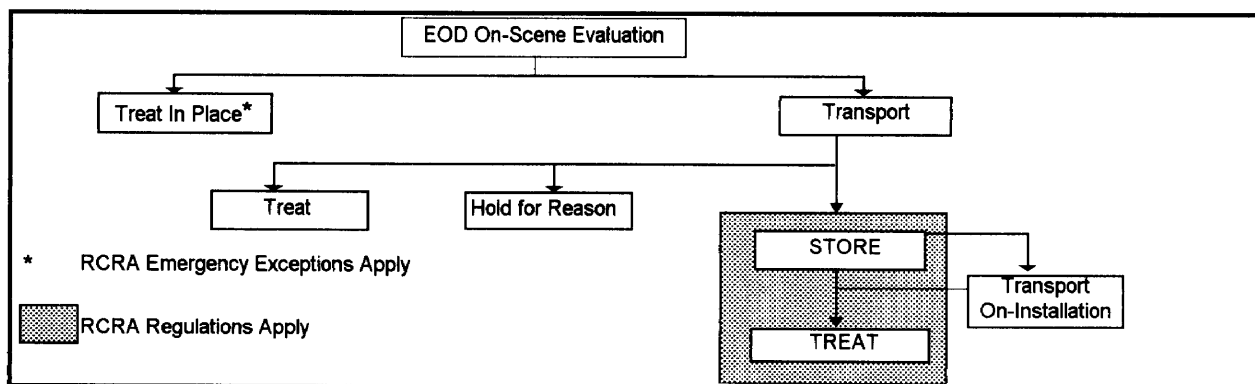


Figure 4-1. EOD emergency response (on-installation)

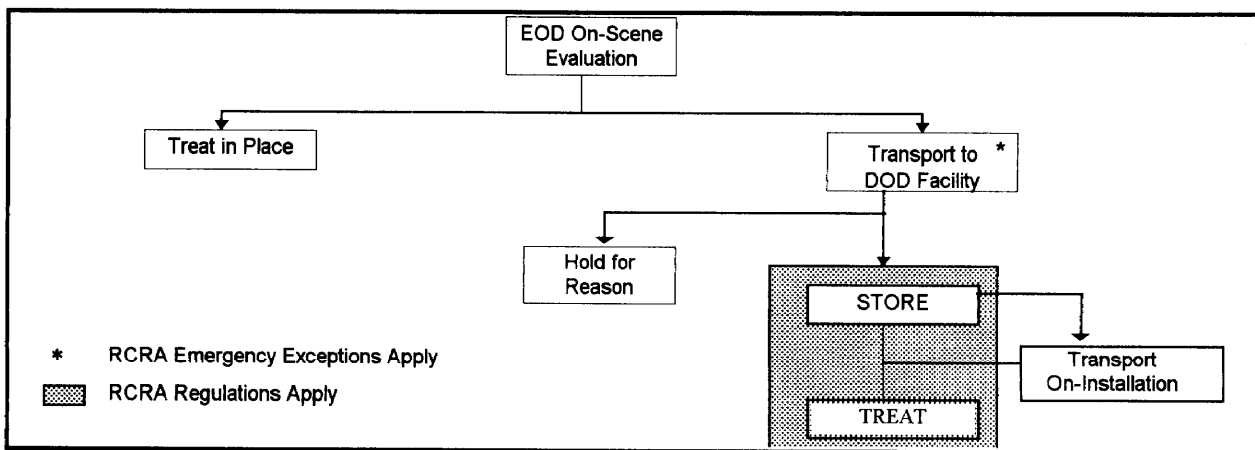


Figure 4-2. EOD emergency response (off installation)

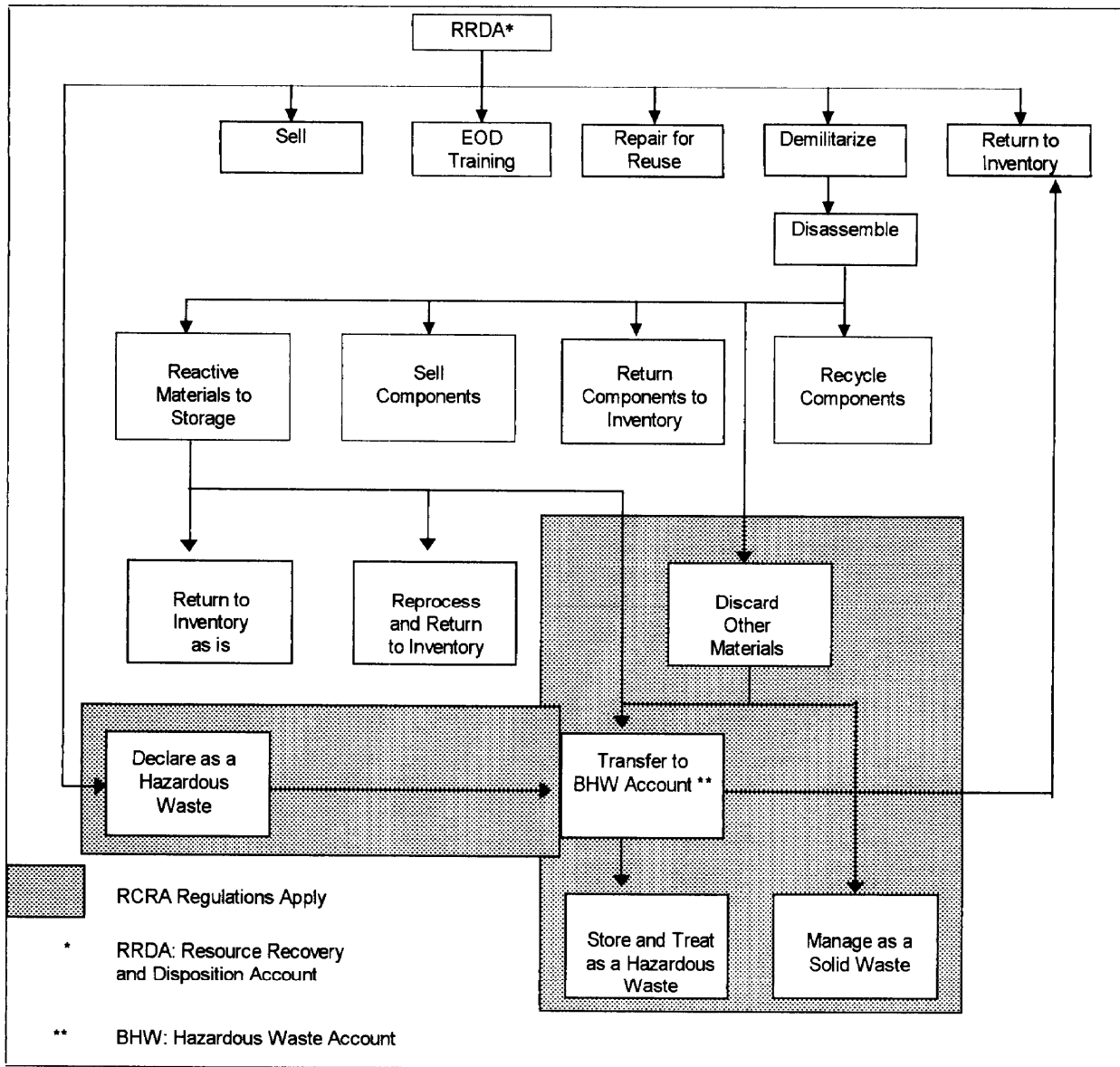


Figure 4-3. Applicability of RCRA regulations to demilitarization operations

EOD training cannot be conducted using ordnance that has been placed in the BHW or hazardous waste category.

Range Management

During the use of conventional explosive ordnance, a percentage is expected to fail to explode or otherwise malfunction. Range management activities include the collection and treatment of conventional explosive ordnance. This clearance is conducted by EOD personnel or civilian munitions destroyers to remove or treat propellants, explosives, and pyrotechnic materials that may threaten

personnel safety or may lead to environmental contamination.

Conventional explosive ordnance that is treated on the spot or consolidated and treated on the same range is considered being used for its intended purpose and, therefore, is not subject to RCRA regulations.

Conventional ordnance that is accumulated during a range clearance and for some reason cannot be treated on site is considered hazardous waste and is subject to RCRA regulations for transportation, treatment, storage, and disposal.

RDTE material that is collected and transported for research or evaluation purposes off its initial

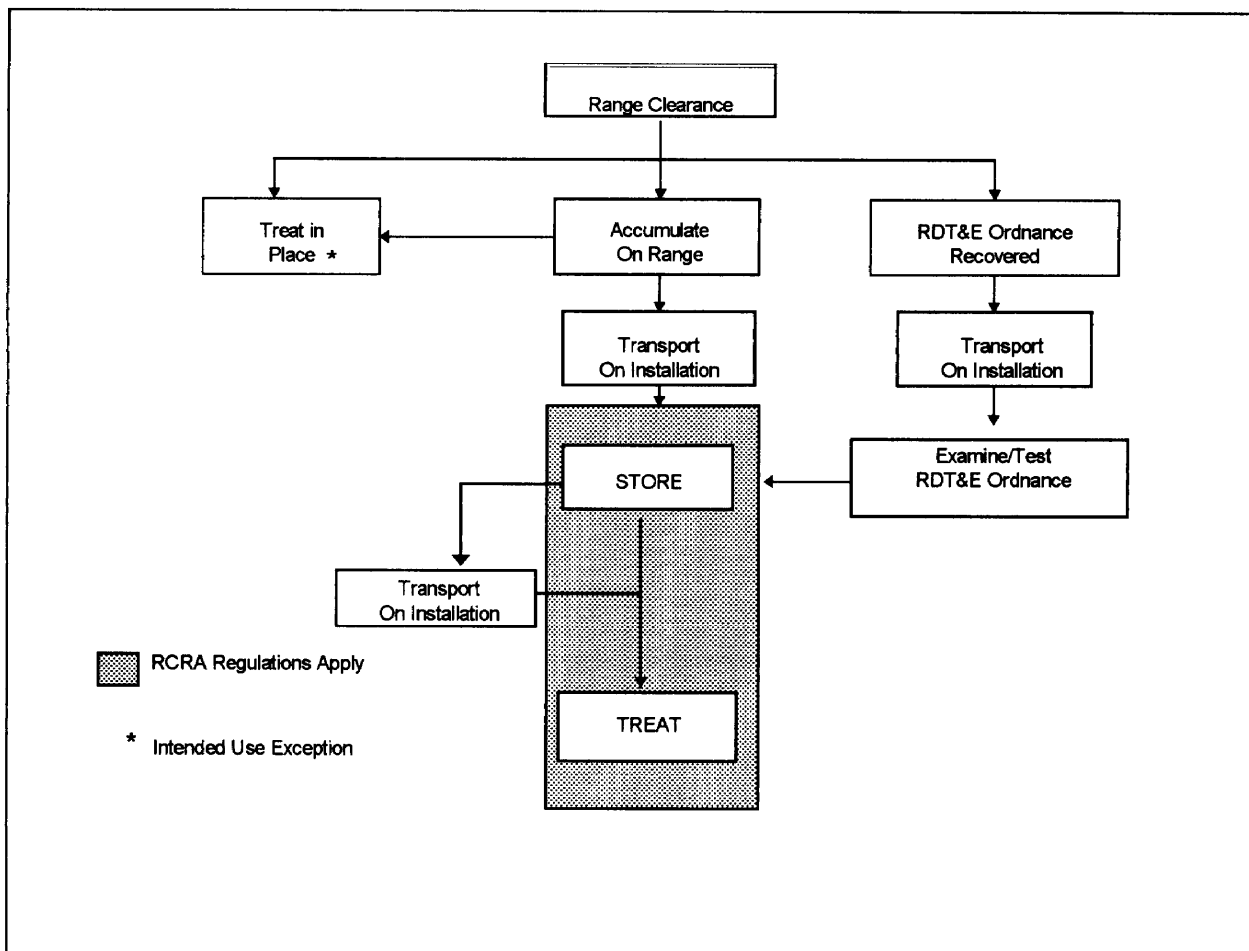


Figure 4-4. Applicability of RCRA to range management operations

range area will be considered hazardous waste after evaluation and research has been completed. This material is then subject to regulations of RCRA for transportation, treatment, storage, and disposal. Figure 4-4 above shows a flowchart of when the items become regulated by RCRA.

Transportation

Transportation of a hazardous waste is regulated by RCRA (40 CFR 263.11 and 263.31) and DOT (49 CFR 171 through 179). Any transportation of a hazardous waste must be completed by a licensed EPA transporter having an EPA permit. The following three exceptions apply for EOD response and transportation requirements:

- **First**, transportation of conventional explosive ordnance to a DOD facility from an off-installation response for the purpose of determining if the ordnance should be discarded, returned to the inventory, or further studied.

- **Second**, on-installation transportation as long as the installation is a RCRA permitted site. This is considered transportation within the licensed facility and is not regulated, except by the owner/operator (DOD, DA, and local regulations and policies).

- **Third**, emergency response actions that require transportation to a remote site for immediate destruction.

Transportation on-installation is regulated by RCRA requirements if the transportation route crosses or involves any public access route.

Occupational Safety and Health Administration

The OSM is another organization that has created a challenge for EOD. The EOD company must find a way to implement the OSHA regulations into its daily operations. While many of these regulations may seem to be unduly restrictive, they are written to make the work places in the United States safer. EOD companies may receive an OSM

inspection without warning. EOD operations are inherently dangerous, and EOD leaders should be doing all that can be done to make them safer. Leaders should look to the OSHA regulations for

ideas to make EOD operations safer. EOD personnel must become familiar with the requirements that affect the daily EOD mission.

**SAMPLE
MEMORANDUM OF UNDERSTANDING
CONCERNING OFF-INSTALLATION
EMERGENCY ACTIONS ON EXPLOSIVES**

1. Parties: The parties to this memorandum of understanding (MOU) are the Department of the Army (DA) Explosive Ordnance Disposal (EOD) unit at _____ ("DA EOD"), the _____ State and/or local agencies ("civil authorities") and the _____ federal, state, or local environmental regulatory agencies ("environmental protection authorities").

2. Background:

a. DA EOD personnel are specially trained and belong to units with the military services. They are trained to handle all types of explosives, including improvised explosive devices. Other federal agencies and civil authorities occasionally call upon DA EOD units for help with emergencies involving explosives. These situations call for immediate action to abate the safety threat by treatment in-place or by removal to a safe location. EOD emergency actions involving explosive materials and devices are not subject to regulation under RCRA.

b. Except for providing temporary storage for or treatment of explosives in order to provide emergency lifesaving assistance to civil authorities or to assist law enforcement agencies in accordance with established agreements between DOD and the head of the federal agency concerned, DOD is prohibited by law (10 USC, Part 2692) from using DOD installations for the storage or treatment of non-DOD-owned hazardous materials.

3. Purpose: This MOU addresses the roles and responsibilities of the parties regarding notification requirements during emergency response operations. The purposes of this MOU are:

- a. To minimize the risk to public safety from DA EOD emergency actions,
- b. To maximize the speed and efficiency of any explosive treatment or retrieval operation, and
- c. To establish a framework for mutual assistance and consultation among the parties with respect to DA EOD emergency actions.

4. Scope: This MOU applies to DA EOD emergency actions in the public sector.

5. Definitions:

- a. **Explosive emergencies** are sudden and unexpected events involving explosives that present a safety hazard to the public.
- b. **DA EOD emergency actions** are DA EOD responses taken to emergencies involving explosives.
- c. **DA emergency actions** in the public sector are responses to events outside the boundaries of military installations.

Figure 4-5. Sample EOD emergency action MOU

6. Roles and Responsibilities:

a. DA EOD Units.

- (1) Provide EOD support to other federal agencies and civil authorities 24 hours a day, as requested.
- (2) Provide a telephone point of contact for response to other federal and civil authorities.
- (3) Provide incident information necessary for satisfying emergency requirements to civil authorities, as requested.

b. Civil Authorities/Agencies Requesting EOD Assistance.

- (1) Upon identification of the emergency, contact the proper environmental protection authority regarding emergency notification requirements.
- (2) Complete any reports and/or notifications required by the environmental protection authority. Request incident information from the responding EOD unit, as necessary, to complete the required reports.

c. Environmental Protection Authorities.

- (1) Provide a telephone point of contact for emergency response calls.
- (2) Help expedite issuance of any emergency permits that may be required.

7. Duration/Amendment/Withdrawal: This MOU will remain in force and effect until amended or terminated by mutual agreement of the parties. Any party may withdraw from the MOU upon 60-days written notice to the other parties.

For DA EOD Unit: (Specify unit)

Date: _____

For Civil Authorities: (Specify Authorities)

Date: _____

For Environmental Protection Authority: (Specify Authority)

Date: _____

Figure 4-5. Sample EOD emergency action MOU (continued)