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Title: Emergency Planning and Community Right-to-Know Act (EPCRA) Reporting of Munitions Demilitarization Operations

## INTRODUCTION

Executive Order 12856 requires Federal facilities to comply with the Emergency Planning and Community Right-to-Know Act (EPCRA), including reporting releases and transfers of toxic chemicals through the Toxics Release Inventory (TRI). Munitions activities, such as open burning and open detonation (OB/OD), may result in reportable releases of EPCRA Section 313 chemicals. The Deputy Under Secretary of Defense for Environmental Security deferred TRI reporting on EPCRA Section 313 chemicals released or transferred from munitions activities, other than manufacture, until after the Military Munitions Rule was published and a mechanism to report was developed.

The Department of Defense (DOD) has signed EPCRA policy establishing criteria for TRI reporting on munitions waste management activities. These activities include resource recovery and recycling operations, disassembly, dismantling, and treatment. DOD will publish technical guidance that outlines threshold accounting procedures and provides munitions compositions and emissions data for TRI reporting.

The purpose of this paper is to inform the DOD demilitarization community on the new reporting requirements,

their implications, and the status of the technical guidance. This presentation does not represent DOD or Army policy or the position of either.

## BACKGROUND

The Emergency Planning and Community Right-to-Know Act has four main parts, described below. Each part operates off different chemical lists and threshold values that trigger regulatory requirements. A further description and discussion of EPCRA requirements are provided in the Appendix.

Sections 301 to 303. Emergency Planning - Facilities must notify local and state emergency planning agencies of the presence of Extremely Hazardous Substances and assists in community emergency response planning.

Section 304. Release Notification Requirements - Facilities must immediately report off-site releases of hazardous substances.

Sections 311 and 312. Community Right-to-Know Reporting - Facilities are required to prepare or have available Material Safety Data Sheets (MSDS) for hazardous chemicals under the Occupational Safety and Health Act (Hazard Communication Standards) and to report annually hazardous substance inventories and locations.

Section 313. Toxic Chemical Release Inventory (TRI)- Facilities that manufacture, process, or otherwise use a listed toxic chemical must report annually their releases of such chemicals to any environmental medium.

## EXECUTIVE ORDER 12856 AND DEPARTMENT OF DEFENSE POLICY

Federal agencies were not included in the definitions of "person" or "facility" in EPCRA. Only certain Government-Owned/ Contractor-Operated (GOCO) facilities were required to comply with all the provisions in EPCRA. The Executive Order required Federal agencies to comply with EPCRA by:

- Changing the definition of "person" to include Federal agencies (Section 2-201).

- Requiring the head of each Federal agency to comply with EPCRA Sections 301 through 312 (Section 3-305).

- o Requiring the head of each Federal agency to comply with EPCRA Section 313 without regard to the Standard Industrial Classification codes. All other existing statutory or regulatory limitations or exemptions on the application of EPCRA Section 313 remained in effect (Section 3-304).

DOD published guidance for the Services and Defense Agencies to implement the Executive Order. This guidance clarifies definitions and concepts related to the Executive Order, defines policy for EPCRA Section 313 TRI reporting and complying with the toxic chemical reduction goals, and provides specific direction for munitions related issues. Guidance is for Federal facility compliance with EPCRA. At contractor-operated facilities, the contractor is required to meet EPCRA requirements as required by the law and implementing regulations.

## REPORTING MUNITIONS MANAGEMENT ACTIVITIES UNDER EXISTING AND PROPOSED EPCRA GUIDANCE

Current DOD policy excludes munitions activities, except for manufacturing activities, from threshold calculations and TRI reporting. Reporting on demilitarization activities begin in 1999 (reports submitted on July 1, 2000). Future DOD policy will establish EPCRA Section 313 reporting requirements for activities conducted on ranges. Munitions management activities includes:

Manufacturing. The “manufacture”, “processing”, or “otherwise use” of EPCRA Section 313 listed chemicals to produce munitions related items is covered by TRI reporting requirements. Federal facilities began reporting in 1994. Contractors at GOCO facilities have been reporting since 1987.

Training. Training activities using munitions and munitions related items include range firing (qualification, live firing and combined service live firing, familiarization), smoke operations, propellant bag burning, naval gunnery, aerial platform weapon system training/gunnery/bombing, and demolition training (including explosive ordnance disposal proficiency training). DOD policy exempts training activities from EPCRA Section 313 reporting through 1999.

Testing. DOD policy considers the “manufacture”, “process”, or “otherwise use” of toxic chemicals for the purpose of testing

munitions, weapons systems, or qualifying munitions by personnel under the Research, Development, Testing, and Evaluation (RDT&E) program as laboratory use. These activities conducted under the RDT&E program are excluded from EPCRA Section 313 reporting through the Laboratory Exemption. This policy interpretation will continue through 1999.

Demilitarization. The demilitarization of munitions and munitions related items is an activity that includes many operations. These operations may include: disassembly, dismantling, mutilation, recycling, recovery, reclamation, reuse, and treatment. The treatment of munitions and munitions related items includes: open burning and open detonation, incineration, chemical neutralization, and other methods of final treatment which alter the chemical composition of the munitions and/or its components.

The TRI Phase II rule, published in the May 1, 1997 Federal Register (62 FR 23834), expanded the types of facilities subject to reporting under EPCRA Section 313 and amended the definition of "otherwise use" to include: use through treatment for destruction, stabilization, and disposal if the facility receives the materials from other facilities for purposes of further waste management activities. TRI Phase II continued the exclusion for including the treatment of wastes generated on-site from threshold calculations. Only the treatment of wastes received from other facilities (off-site) counts towards the "otherwise use" threshold calculation (The Military Munitions rule and implementing guidance determines when munitions are received at an installation for further waste management). Any EPCRA Section 313 chemicals created in the treatment or destruction process, are counted towards the "manufacture" threshold (their formation meets the definition of "manufacture" under EPCRA). Depending on whether the waste originated on-site or off-site, the treatment of the incidentally manufactured chemicals is considered a use and its' treatment counts towards the "otherwise use" threshold.

How this expanded "otherwise use" definition is applied under DOD policy determines the reporting requirements. The main policy considerations are: (1) the definition of "processing" activities for munitions management activities; and (2) the application of the TRI Phase II definition for "otherwise use" for waste treatment activities. Table 1 shows existing guidance, TRI Phase II regulatory requirements, and DOD policy beginning in 1999 for reporting demilitarization activities. The main differences between the U.S. Environmental Protection Agency's (EPA) regulations and DOD policy is in how the treatment of munitions

on-site is counted towards reporting thresholds. Under all options:

- Both the EPCRA Section 313 chemicals in munitions treated, recovered, or recycled and EPCRA Section 313 chemicals incidentally manufactured by demilitarization activities and their further waste management are counted toward appropriate reporting thresholds.

- If any of the three reporting thresholds for a EPCRA Section 313 chemical is exceeded by an activity, all releases and transfers of the chemical from all uses of the chemical on the installation, including munitions reuse and treatment, must be reported.

Demilitarization activities need to be viewed in terms of removing the military offensive or defensive advantages of the ammunition and explosives, which may or may not include the disposal of the item. Under this scenario munitions management activities are arranged into three groups: (1) disassembly and dismantling; (2) recycling; and (3) treatment. Activities such as recovery, reclamation, and reuse fall into one of these categories depending on the operation performed.

Disassembly and dismantling activities are the mechanical separation of a munition into other end items or component parts. Under EPCRA this is the same as relabeling or redistributing a container of an EPCRA Section 313 chemical where no repackaging of the chemical occurs. This does not constitute “otherwise use” or “processing” of an EPCRA Section 313 chemical so these activities would not count towards a reporting threshold. Operations, such as pulling fuzes from munitions, will not expose the chemicals in the component items.

Recycling activities are operations where the EPCRA Section 313 chemical component of an end item is recovered or otherwise obtained for subsequent use, in the same or different state. Wash-out and steam-out activities fall into this category. Under EPCRA definitions, this form of recycling or recovery is considered “processing”.

Treatment activities are operations where the item is destroyed. Incineration and OB/OD activities fall into this category. Under EPCRA this is considered as treatment for destruction where the EPCRA Section 313 chemical is destroyed. Threshold calculations are in accordance with DOD policy and considered an “otherwise use”.

Treatment of munitions may incidentally manufacture some EPCRA Section 313 chemicals. These amounts would accumulate towards the 25,000 pounds “manufacturing” threshold. If these incidentally manufactured chemicals undergo further waste management, then these amounts would accumulate towards the 10,000 pounds “otherwise use” threshold

Under these definitions, munitions can first be separated into component parts without threshold accounting. TRI reporting is based on:

- o If a component part is treated, then threshold accounting is in accordance with DOD policy and the activity counts towards the “otherwise use” threshold.

- o If the component part is recycled to recover the explosive (such as wash-out), then the activity counts towards the “processing” threshold.

**CONVENTIONAL MUNITIONS: EXAMPLE THRESHOLD ACCOUNTING**

Conventional munitions demilitarization activities may involve the following activities:

- o Separation of components, energetics, and casings:

- o On-site treatment of energetics and propellants:

- o Recovery for reuse of energetics, propellants, casings, scrap, or other items is “processing”.

The most common case involves the treatment of munitions by OD/OB without prior processing for recovery. As an example, consider a site performing open detonation on four types of hypothetical munitions during a calendar year. Table 2 lists the EPCRA Section 313 chemicals in each munitions type with the amount of each chemical treated during the year.

Under EPCRA regulations (TRI Phase II), the amounts of listed toxic chemicals (Section 313) contained in munitions designated as waste at the installation (generated on-site) would not count towards any reporting threshold. Unless the installation exceeds an activity threshold conducting other operations with the chemicals listed in the table below, an EPCRA Section 313 Form R TRI reporting would not be required for these chemicals.

Table 2: Estimated Annual Toxic Chemicals (pounds) treated in munition type Munition’s Energetics and Casings.

| Munitions | Aluminum powder | Dinitro-toluene | Hexa-chloro-ethane | Nitro-glycerin | White Phosphorus | Copper (casing) | Zinc (casing) |
|---|---|---|---|---|---|---|---|
| A | 2,226 | 9,455 | 54,788 | 3,264 | 0 | 14,714 | 1,865 |
| B | 5,578 | 8,586 | 49,753 | 2,963 | 0 | 13,361 | 1,693 |
| C | 0 | 27,063 | 0 | 65,252 | 219,356 | 60,045 | 7,611 |
| D | 0 | 31,670 | 0 | 76,362 | 256,706 | 70,269 | 8,907 |
| Annual Chemical | 7,804 | 76,774 | 104,541 | 147,841 | 476,062 | 158,389 | 20,076 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Use Totals | | | | | | | |

If the munitions were received by the installation from off-site for waste management (designated as waste before arriving at the installation), then the amounts of toxic chemicals in the munitions would count towards the 10,000 pounds “Otherwise use” reporting threshold. Release and transfer reporting would be required for all the chemicals in the table except Aluminum powder.

DOD policy considers all munitions treatment activities as the use of a toxic chemical and these activities count towards the 10,000 pounds “otherwise use” reporting threshold. Release and transfer reporting is required for all the chemicals in the table except Aluminum powder. This may cause an installation (using DOD policy) to file a different EPCRA Section 313 TRI report than the contractor operating a GOCO facility (using EPA guidance) even though both are conducting the same activities.

Regardless of the on-site/off-site designation (waste generation point), the installation must attempt to determine the EPCRA Section 313 chemicals created (incidentally manufactured) by the open detonation (treatment) of each munitions type. Facilities are required to use the best available information in making threshold determinations and release and other waste management calculations. These amounts accumulate towards the 25,000 pound “manufacturing” reporting threshold.

Threshold accounting for the treatment of incidentally manufactured EPCRA Section 313 chemicals generated from the treatment of the original waste is determined by where the original waste originated (identified as waste).

- Under TRI Phase II the treatment of the incidentally manufactured EPCRA Section 313 chemicals are exempt from threshold accounting if the original waste was generated (created) on-site (at the installation). If the original material was shipped as a waste to the installation, then the treatment of incidentally manufactured EPCRA Section 313 chemicals are counted towards the “otherwise use” threshold

- Under DOD policy the treatment of the incidentally manufactured EPCRA Section 313 chemicals are counted towards the “otherwise use” threshold. Under EPCRA

regulations, release is considered further waste management.

**CONVENTIONAL MUNITIONS: EXAMPLE REPORTED RELEASES AND TRANSFERS**

Once a reporting threshold is exceeded for an EPCRA Section 313 chemical, reporting releases to the air, water, and land and transfers off-site for disposal, treatment, energy recovery, or recycling is required. Based on the amounts treated in the example above, estimated releases and transfers are:

Land releases. (1) Energetic material not destroyed (incomplete reaction) by open detonation is reported as a land release. EPCRA chemicals produced by the reaction (detonation) count towards the 25,000 pound “manufacture” threshold and are reported for each EPCRA Section 313 chemical that exceeds the threshold. Metal casings are reported as sent off-post for recycling and as a land release for amounts not recovered.

Air releases. Assuming that air releases of toxic chemicals other than metals average $10^{-6}$ pound per pound of explosives, reported air releases should be negligible. (Air releases of metals as dust are assumed to fall to land and are counted as land release.)

Water releases. For this estimate, water releases are assumed to be zero based on OB/OD site location and management practices designed to prevent aquifer or surface water contamination. Some minor storm water releases may result.

Transfers off-site. Scrap metal recovered from the OB/OD site may be recycled off-site after further decontamination. All off-site transfers for recycling the metals would be reported. Off-site transfers for energy recovery, disposal, or further treatment are not anticipated, but would be reported if occurring.

Most detonations are initiated using other explosives or energetic material. Under EPCRA this is considered use and the EPCRA Section 313 chemicals contained in this material are counted towards the "otherwise use" reporting threshold. If this threshold is exceeded, then release reporting is primarily based on the amount of material not consumed in the detonation and the EPCRA Section 313 chemicals this material creates from the detonation (if the “manufacture” reporting threshold is exceeded for the created chemical). If identical EPCRA Section 313

chemicals are contained in the munitions being treated and the energetic material used to initiate the detonation, then these amounts are added together towards the “otherwise use” reporting threshold.

## CHEMICAL MUNITIONS

The same example used for conventional munitions applies to the demilitarization of chemical munitions. The same EPCRA Section 313 chemicals contained in fuzes, bursters, and propellants for conventional munitions are in chemical munitions. For chemical agents, mustard is a listed EPCRA 313 toxic chemical.

- Threshold Accounting:

  Under TRI Phase II the treatment of EPCRA Section 313 chemicals contained in these munitions are exempt from threshold accounting because the waste was generated (identified) on-site (at the installation).

  Under DOD policy the treatment of EPCRA Section 313 chemicals contained in these munitions are counted towards the “otherwise use” threshold.

  EPCRA Section 313 chemicals created (hydrochloric acid) by incinerating the munitions is consider “manufactured” and these amounts accumulate towards the 25,000 pound “manufacturing” reporting threshold.

  Under TRI Phase II the treatment of the incidentally manufactured EPCRA Section 313 chemicals is exempt from threshold accounting because the waste was generated (created) on-site (at the installation).

  Under DOD policy the treatment of the incidentally manufactured EPCRA Section 313 chemicals are counted towards the “otherwise use” threshold (neutralization of an acid in the pollution control equipment).

Once a reporting threshold is exceeded for an EPCRA Section 313 chemical, reporting releases to the air, water, and land and transfers off-site for disposal, treatment, energy recovery, or recycling is required.

o Release Reporting:

Air and Land Releases. This can be calculated based on either the destruction and removal efficiency of the incinerator or from monitoring data.

Transfers off-site. Metal scrap will be recycled off-site. Metal compounds generated from the incineration process would be reported as off-site transfers for disposal or further treatment.

# APPENDIX

## GENERAL REQUIREMENTS

For more detailed descriptions of EPCRA reporting requirements, consult the references listed below. A brief summary of EPCRA reporting requirements follows.

- March 1996 DUSD(ES) Executive Order 12856 policy guidance and the July 1996 and March 1998 Supplemental Guidance.

- Emergency Planning and Community Right-to-Know Act of 1986, 42 U.S.C. Sections 13101-13109.

- Executive Order 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements.

- U.S. Environmental Protection Agency (EPA) documents:

  EPCRA Section 313 Questions and Answers, November 1997, EPA 745-B-97-008

  Guidance for RCRA C TSD Facilities and Solvent Recovery Facilities, October 1997.

  Guidance for Metal Mining Facilities, October 1997.

  Addendum to the Guidance Documents for the Newly Added Industries, February 1998.

  Interpretation of Waste Management Activities: Recycling, Combustion for Energy Recovery, Treatment for Destruction, Waste Stabilization, and Release, April 1997.

- Rules published in the Federal Register (FR):

  April 22, 1987 (52 FR 13378)
  October 15, 1987 (52 FR 38344)
  February 16, 1988 (53 FR 4500)
  May 24, 1989 (54 FR 22543)
  July 24, 1990 (55 FR 30166)
  July 26, 1990 (55 FR 30632)
  May 1, 1997 (62 FR 23834)

**Sections 301 to 303: Emergency Planning**

Section 301 requires each state to establish an emergency response commission. The state commission is responsible for establishing emergency planning districts and appointing, supervising, and coordinating local emergency planning committees.

Section 303 governs the development of comprehensive emergency response plans by the local emergency planning committees and provision of facility information to the committee. Under Section 303(d), facilities subject to emergency planning must designate a facility representative who will participate in the local emergency planning effort as a facility emergency response coordinator. This section also requires facilities to provide the committee with information relevant to the development or implementation of the local emergency response plan.

Section 302 required the U.S. Environmental Protection Agency (EPA) to publish a list of extremely hazardous substances and threshold planning quantities (TPQs) for such substances. Any facility where an extremely hazardous substance is present in an amount in excess of the threshold planning quantity is required to notify the state commission. Such notification should be in writing and specify the name and an accurate current address of the facility. The list of extremely hazardous substance is defined in section 302(a)(2) as "the list of substances published in November 1985 by the Administrator in Appendix A of the Chemical Emergency Preparedness Program Interim Guidance". This list was established by EPA to identify chemical substances which could cause serious irreversible health effects from an accidental release. Section 302(a)(3) required EPA to initiate a rulemaking to revise the threshold planning quantities.

The total amount of each extremely hazardous substance present at any one time at a facility, regardless of location, number of containers or method of storage must be determined. Reporting is required for any extremely hazardous substance present at the facility that equals or exceeds the TPQ. The threshold planning quantities are intended to provide a "first

cut" for community emergency response planners where these extremely hazardous substances are present. This list of chemicals is published at Title 40 Code of Federal Regulations (CFR) 355 Appendices A and B.

## Section 304: Release Notification Requirements

Section 304 establishes requirements for immediate reporting of certain releases of hazardous substances to the local emergency planning committees and the state emergency response commissions. Section 304 also requires follow-up reports on the release, its effects, and response actions taken. Emergency release notification requirements are outlined at 40 CFR 355. Reportable quantities for extremely hazardous substances are located at 40 CFR 355 Appendices A and B. Reportable quantities for Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) hazardous substances are at 40 CFR 302.4.

Certain releases are exempt from this notification requirement: (a) "Federally permitted releases" as determined under the Comprehensive Environmental Response, Compensation and Liability Act of 1990 section 101(10); (b) releases which only result in exposure to persons within the facility boundaries; (c) releases from a facility which produces, uses, or stores no hazardous chemicals; (d) "continuous releases" as defined under CERCLA section 103(f); and (e) releases of a FIFRA registered pesticide, as defined under CERCLA section 103(e).

Section 304 reporting requirements are in addition to, not a substitute for, other reporting requirements under CERCLA and state laws.

## Sections 311 and 312: Community Right-to-Know Reporting

Sections 311 and 312 provide a mechanism through which a community can receive material safety data sheets and other information on extremely hazardous substances as well as many other chemicals. Reporting thresholds are set at 10,000 pounds for non extremely hazardous materials and 500 pounds, or the threshold planning quantity (whichever is lower), for extremely hazardous substances. Applicability for this part of EPCRA is not

based on any list of specific chemicals, but on the definition of "hazardous chemical" under the Occupational Safety and Health Act's. This covers all materials required to have a MSDS under the Hazard Communication Standard (29 CFR 1910.1200). A "hazardous chemical" is defined as an element, chemical compound, or mixture of elements and compounds that is a physical or health hazard. The requirements for MSDS reporting and inventory form reporting are outlined at 40 CFR 370.

Section 311 applies to any facility that is required to prepare or have available a MSDS. The facility must submit individual MSDSs, or a list of chemicals for which the facility is required to have MSDSs, to the appropriate state emergency response commission, local emergency planning committee, and local fire department (one time notification).

Under Section 312, facilities covered by section 311 are required to submit additional information (annual report) on the presence, general quantity, health hazard, and location of hazardous chemicals at the facility.

To determine whether the facility has a hazardous material present in an amount which equals or exceeds a threshold value, the owner or operator must determine the total amount present at any one time at a facility, regardless of location, number of containers or method of storage. The amount of a hazardous material present in mixtures or solutions in excess of one percent (or 0.1 percent for carcinogens) are included in the determination.

Exemptions from the requirements to prepare or have available an MSDS is outlined at 29 CFR 1910.1200(b). The main categories of chemicals that are excluded from the threshold determinations and reporting requirements are:

- Any substance present as a solid in a manufactured item (must meet specific conditions).
- Any substance used in laboratories, hospital, or medical facility under the supervision of a technically qualified individual.

- Any substance used for personal or household use (consumer product).

- Any substance used in routine agricultural operations.

- A hazardous waste regulated under the Resource, Conservation, and Recovery Act.

**Section 313: Toxic Chemical Release Inventory**

The Toxic Release Inventory consolidates data addressing toxic chemical releases to all environmental media (permitted and unpermitted releases) into an inventory system that is annually aggregated and readily available to the public. Reporting requirements and the list of chemicals and chemical compounds are outlined at 40 CFR 372. A facility that meets the following criteria is required to report under this provision.

- The facility has 10 or more full time employees.

- The facility is in the following Standard Industrial Classification (SIC) codes:

  Major group codes 10 (except 1011, 1081, 1094), 12 (except 1241), or 20 through 39; or

  Industry codes 4911, 4931, or 4939 (coal/oil power generation), 4953 (hazardous waste treatment), or 5169, or 5171, or 7389 (solvent recovery services).

- The facility manufactured, processed, or otherwise used a toxic chemical in excess of an applicable threshold quantity during a calendar year. The “manufacture” or “process” threshold is 25,000 pounds. The “otherwise use” threshold is 10,000 pounds.

The use of the chemical is counted towards an applicable threshold. The releases and transfers are what is reported. The terms "manufacture", "process", and "otherwise use" are defined as follows.

Manufacture. To produce, prepare, import, or compound a toxic chemical. Manufacture also applies to a toxic chemical that is produced coincidentally during manufacture, processing, use, or disposal of another chemical or mixture of chemicals, including a toxic chemical that is separated from that other chemical or mixture of chemicals as a byproduct, and a toxic chemical that remains in that other chemical or mixture of chemicals as an impurity.

Process. The preparation of a toxic chemical, after its manufacture, for distribution in commerce: (1) In the same form or physical state as, or in a different form or physical state from, that in which it was received by the person so preparing such substances, or (2) As part of an article containing the toxic chemical. Process also applies to the processing of a toxic chemical contained in a mixture or trade name product.

Otherwise use. Any use of a toxic chemical, including a toxic chemical contained in a mixture or other trade name product or waste, that is not covered by the terms "manufacture" or "process". Otherwise use of a toxic chemical does not include disposal, stabilization (without subsequent distribution in commerce), or treatment for destruction unless: (1) The toxic chemical that was disposed, stabilized, or treated for destruction was received from off-site for the purpose of further waste management; or (2) The toxic chemical that was disposed, stabilized, or treated for destruction was manufactured as a result of waste management activities on materials received from off-site for purposes of further waste management activities. Relabeling or redistributing a container of a toxic chemical where no repackaging of the toxic chemical occurs does not constitute use or processing of the toxic chemical.

EPCRA considers waste management activities to mean recycling, combustion for energy recovery, treatment for destruction, waste stabilization, and release, including disposal. Waste management does not include the storage, container transfer, or tank transfer of a Section 313 chemical if no recycling, combustion for energy, treatment for destruction, waste stabilization, or release of the chemical occurs at the facility. The EPCRA definition of these

terms has to be used in order to apply “otherwise use” to waste management activities. The terms “waste stabilization”, “release”, “treatment for destruction”, “disposal” are defined at 40 CFR 372.3. The term “combustion for energy recovery” is defined in the guidance document for RCRA C TSD facilities listed in the references. The definition for “recycling” along with the definition for “recovery” is provided below. Recovery defines what recycling means under EPCRA. Recycling is the removal of an EPCRA Section 313 chemical from a waste stream where the chemical is returned to the process or is obtained for future use.

Recycling. Recycling is: (1) the recovery for reuse of a Section 313 chemical from a gaseous, aerosol, aqueous, liquid, or solid stream; or (2) the reuse or the recovery for reuse of a Section 313 chemical that is a RCRA hazardous waste as defined in 40 CFR 261.

Recovery. Recovery is the act of extracting or removing the Section 313 chemical from a waste stream and includes: (1) the reclamation of the Section 313 chemical from a stream that entered a waste treatment or pollution control device or process where destruction of the stream or destruction or removal of certain constituents of the stream occurs (including air pollution control devices or processes, wastewater treatment or control devices or processes, Federal or state permitted treatment or control devices or processes, and other types of treatment or control devices or processes); and (2) the reclamation for reuse of an “otherwise used” Section 313 chemical that is spent or contaminated and that must be recovered for further use in either the original or any other operations.

Certain applications and uses of toxic chemicals are exempt from threshold determinations and release reporting.

- De minimis concentrations of a toxic chemical in a mixture (one percent for a listed chemical or 0.1 percent where the chemical is a carcinogen).
- Toxic chemicals present in an article (must meet specific conditions).
- Activities in laboratories under the supervision of a technically qualified individual.
- Certain uses.

Use as a structural component of a facility

Use of products for routine janitorial or facility grounds maintenance.

Employee personal use.

Use for motor vehicle maintenance.

Chemicals in intake water and air (background levels present in the environment).

The thresholds for processing and use are based upon the total amounts actually used or processed at the facility, not the amount brought to the facility during the year. If the facility exceeds any threshold for a listed chemical, it must report all emissions of that chemical from the facility.