

CHAPTER 12

Routine Reporting



This chapter describes:

- Routine environmental reports that may be required of fuel facilities
- Time lines for forms and reports that must be submitted to federal or state regulatory agencies

12.1 Regulatory Background

Several environmental regulations require facilities to submit environmental reports to federal or state agencies to demonstrate compliance with the regulatory requirements. This chapter discusses some of the more common reports to be submitted, which are shown in *Exhibit 12–1*.

EXHIBIT 12–1
Routine Environmental Compliance Reporting

Report	Act	Federal Regulations	Due Date
Emergency Planning and Notification	Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) Sections 301–304	40 CFR 355	Within 60 days of an extremely hazardous substance (EHS) present on-site above threshold planning quantity (TPQ); immediate notification of reportable release
Safety Data Sheet (SDS) or List Submittal	EPCRA Section 311	40 CFR 370 29 CFR 1910.1200	Submit updated SDS or list within three months of new chemicals on-site
Tier II Report	EPCRA Section 312	40 CFR 370	March 1, annually
Form R	EPCRA Section 313	40 CFR 372	July 1, annually
Hazardous Waste Biannual (or Annual) Report	RCRA	40 CFR 262	March 1, annually or every other year in some states
Discharge Monitoring Report (DMR)	Clean Water Act (CWA)	40 CFR 122.41	Specified in National Pollutant Discharge Elimination System (NPDES) permit; often monthly, quarterly and annually
Air Emissions Inventory	Clean Air Act (CAA)	NA ¹	Varies by state
New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Air Compliance Notifications and Reports	CAA	40 CFR 60 and 63	Varies by state



The Law Says

- You must submit the Emergency Planning and Community Right-to-Know Act (EPCRA) Tier II reports to the state emergency response commission (SERC), local emergency planning committee (LEPC), and community fire department by March 1 every year if hazardous chemicals are present above specific thresholds in the prior calendar year (40 CFR 370.40).
- You must submit your Toxics Release Inventory (TRI) reports (Form Rs) to EPA and SERC by July 1 if you manufacture, process, or otherwise use toxic chemicals over certain thresholds in prior calendar year (40 CFR 372.30).
- You must submit your biennial or annual hazardous waste report to your state agency by March 1 if you are a large quantity generator (or if your state requires you to submit this report) (40 CFR 262.41).
- You must submit your annual air emissions inventory report to your state agency and an annual fee as specified by your state air quality department. (40 CFR Part 70 and 40 CFR 372.10)
- You must maintain copies of reports, calculations, inspections, repairs, equipment, calibrations, and maintenance logs for 2, 3, or 5 years depending on the regulatory requirements.



Report	Act	Federal Regulations	Due Date
Title V Permit Compliance Certifications	CAA Amendments, Title V	40 CFR 70	Every 6 months
Pipelines (off facility)	U.S. Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA)	49 CFR 195	June 15, annually

¹Not applicable: refer to the individual state regulations on emissions reporting.

Because of the diverse operations at U.S. Department of Defense (DoD) facilities, you must identify and comply with the requirements applicable to your facility. Most environmental regulations require that a copy of the environmental report and supporting calculations be retained at the facility for a specified period of time.

12.2 Emergency Planning and Community Right-to-Know Act Reporting

The Superfund Amendments and Reauthorization Act (SARA) was signed in 1986. Title III of SARA (commonly known as EPCRA) requires state and local governments to develop plans for chemical emergencies and requires covered facilities to report hazardous chemical inventories and releases of toxic chemicals. This information reported by facilities is made available to the public through federal, state, and local agencies. For exclusions and exemptions from EPCRA requirements, see [Appendix 12-1](#).

Federal facilities have been complying with EPCRA since 1993 and Executive Order (EO) 12856, *Federal Compliance With Right-To-Know Laws and Pollution Prevention Requirements*. Since then, multiple consecutive EOs and their implementing instructions have required continued compliance with EPCRA. EO 13834, *Efficient Federal Operations*, signed May 17, 2018, revoked EO 13693 (the most recent prior EO) and the implementing instructions, which required federal facility compliance with EPCRA. As of the date of this guide, DoD has not issued guidance relating to this EO or continued EPCRA compliance.

The DoD EPCRA and/or TRI Joint Services Working Group issued the "Consolidated Emergency Planning and Community Right-to-Know Act (EPCRA) Policy for DoD Installations, Munitions Activities, and Operational Ranges," more commonly referred to as the Consolidated EPCRA Policy, in September 2006. This policy provides DoD-specific guidance on how to apply exemptions, address DoD-specific situations, and other information for DoD facilities. All DoD facilities must follow this policy, even where it is different from EPA guidance or policy.

12.2.1 Emergency Planning (Sections 301 to 303 of EPCRA)

If a facility has one or more extremely hazardous substances (EHSs) present on-site at any one time above established thresholds, regardless of its location, number of containers, or method of storage, it must:

Don't Forget...

Remember to promptly inform your LEPC of any changes at the facility that may impact emergency planning.

- Notify the state emergency response commission (SERC)
- Notify the local emergency planning committee (LEPC)
- Provide information, when requested, to the LEPC to help it develop a local Emergency Response Plan (the plan usually includes a map showing location and quantity of stored chemicals)
- Notify the LEPC of any changes at the facility that affect emergency planning
- Designate a facility emergency coordinator or qualified individual (QI)

The list of EHSs and their reporting quantities, called threshold planning quantities (TPQs), are in 40 CFR 355 regulations and are in the U.S. Environmental Protection Agency (EPA) reference document “List of Lists.”

Your SERC’s address, phone number, and website are available via the link referenced in [Appendix E](#). Contact your SERC to get the name and number of your LEPC if you do not know this information.

12.2.2 Notification of a Release (Section 304 of EPCRA)

You must call your LEPC and SERC immediately (and follow up in writing) if you release a reportable quantity (RQ) of an EHS (listed in 40 CFR 355) or a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) hazardous substance (in 40 CFR 302) within a 24-hour period and the release has the potential to travel beyond your property boundaries. The notification requirement is in addition to the requirement to notify the National Response Center (NRC) and other agencies if required. Refer to [Chapter 2, Incident and Spill Reporting](#) for more information on agency notification.

12.2.3 Submitting Safety Data Sheet Information (Section 311)

The Occupational Safety and Health Administration’s (OSHA) Hazard Communication Standard (HCS) conforms to the United Nations Globally Harmonized System of Classification and Labeling of Chemicals. Under this system, SDSs have been standardized and contain standard 16 sections.

Under Section 311 of EPCRA and 40 CFR 370 Subpart B and C, you must submit SDSs to the LEPC, SERC, and community fire department if hazardous chemicals are present on-site above the following EPA threshold quantities:

- All hazardous chemicals present at any one time in amounts equal to or over 10,000 pounds (lb) (equal to about 1,200 gallons or 22 drums)
- Any EHSs present at any one time in amounts equal to or over 500 lb (about 55 gallons) or above the TPQ, whichever is less

Alternatively, you may submit a list of hazardous chemicals for which you have exceeded thresholds to your LEPC, SERC, and community fire department. This is a one-time reporting requirement, but if new hazardous chemicals become present in amounts that trigger reporting, then this new information must be submitted within 3 months of the chemical triggering reporting threshold. It is a good practice to notify the same agencies if you discontinue using previously reported chemicals.

Regardless of the quantities of hazardous chemicals at your facility, you must always have SDSs readily available to your employees.



12.2.4 Hazardous Chemical Inventory or Tier II Reports (Section 312)

To promote the safety of the community and workers, EPA requires facilities to report the amounts and locations of hazardous chemicals to local emergency responders. Under Section 312 of EPCRA and regulations in 40 CFR 370, you must submit an annual hazardous chemical inventory report to appropriate agencies for all hazardous chemicals present or stored at the site at any one time in excess of threshold levels.

Threshold quantities for reporting are the same as those listed for SDS submittal as noted in the previous section (more than 10,000 lb for hazardous chemicals, or more than 500 lb or the TPQ for EHSs), although some states and local governments have chosen to establish more stringent reporting thresholds under their laws.

The Tier II inventory report form is due to the LEPC, SERC, and community fire department by March 1 of every year. The report covers the chemicals on-site during the previous calendar year. Most SERCs require electronic submittal of the Tier II form.

Contact your SERC and LEPC to determine if they require the EPA form or a state-issued version of that form and whether they accept hard copy or electronic submittals.

The information required on the form includes a description of any type of hazard the material may pose, the quantities stored, general storage locations, type of storage, and general pressure and temperature data. You will need to know the maximum amount of hazardous chemical present at any time and an estimate of the average daily amount present. The total quantity of the hazardous chemical must be compared to the threshold by adding together all quantities of that chemical. For instance, if you store diesel in one aboveground tank and more diesel in one underground tank, then the amounts are combined and applied to the threshold.

The Tier II form also requires you to provide an emergency contact phone number where information is available 24 hours per day. When submitting EPCRA Section 312 information, it is suggested that any changes to the facility that may affect emergency planning or additional SDS submission information per Sections 301, 303, and 311 be provided to the SERC, LEPC, and your community fire department when you submit your Tier II information. If requested, you must allow an on-site inspection by the community fire department.

12.2.5 Toxic Chemical Release Inventory Reporting (Section 313)

Section 313 of EPCRA and regulations in 40 CFR 372 require certain facilities to report the quantities of listed toxic chemicals released into the environment, transferred to other locations, recycled, treated, or burned for energy recovery. To complete the TRI form, called Form R, the facility must calculate or estimate the quantity of a chemical involved in each of these waste-handling activities.

Originally, the TRI reporting requirements applied to certain manufacturing facilities. EPA later added several industry groups, including petroleum bulk storage stations and terminals (those under North American Industry Classification System [NAICS] code 42271), to those that must file the Form R. In 1993, EO 12856 and multiple consecutive EOs since then, extended this requirement to federal facilities regardless of their NAICS code.

As mentioned previously, EO 13834, signed May 17, 2018, revoked EO 13693 and the implementing instructions, which required each federal facility to comply with the provisions in EPCRA and Section 313 regardless of NAICS code. As of the date of this guide, DoD has not issued guidance relating to this EO or continued EPCRA compliance.

The DoD Consolidated EPCRA Policy contains significant policy regarding Section 313. One key item pertains to fuel SDSs and composition information. DoD facilities must use the SDS for their fuel supplier for threshold calculations. Generic fuel compositions, such as those in EPA guidance documents, are not to be used.

The Defense Logistics Agency (DLA) may receive requests from DoD facilities and/or military installations for specific fuel SDS from the actual supplier and/or manufacturer in support of EPCRA.

The flow chart in [Appendix 12-2](#) can help determine whether your facility is subject to the TRI reporting requirements.

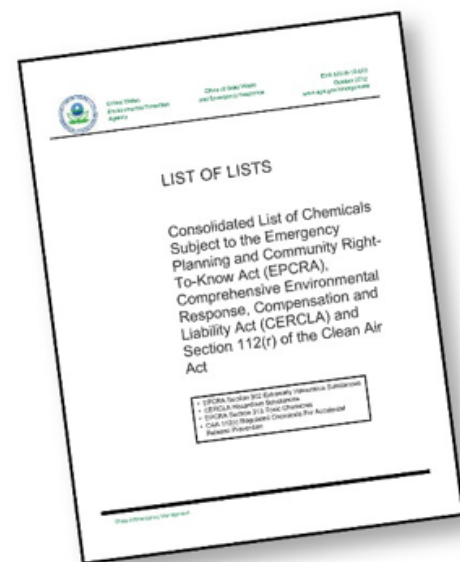
12.2.5.1 Activity Thresholds

You must file a TRI report if you have at least 10 full-time employees (or total hours worked by all employees is over 20,000 hours/year) at your fuel facility *and* you:

- Manufacture over 25,000 lb per year of an individual toxic chemical, or
- Process over 25,000 lb per year of an individual toxic chemical, or
- Use 10,000 lb per year of one or more toxic chemicals, or
- Manufacture, process, or otherwise use a persistent bioaccumulative toxic (PBT) chemical in an amount per year over the chemical-specific threshold level.

“Manufacture” means to produce, prepare, or import into the U.S. “Processing” means incorporating a manufactured chemical into a product for distribution in commerce. “Processing” includes using the chemical as a reactant, in formulations, and repackaging. For example, blending and mixing of additives or other agents into gasoline and aviation fuel before distribution into commerce is processing. “Repackaging” means transferring the material from one container to another container, such as the transfer from bulk storage tanks to tanker trucks for further distribution. Recycling of a chemical for sale is also considered processing. Relabeling or redistributing the chemical without repackaging does *not* constitute processing.

Any use of a toxic chemical that is not covered under manufacturing or processing is to “otherwise use” the chemical and is subject to the 10,000 lb threshold. Examples of chemicals that are otherwise used by a facility are processing aids, catalysts, inhibitors, and solution buffers that are not intended to remain in or





Did You Know?

Fuel could contain additives such as antioxidants, biocides, corrosion inhibitors, oxygenates, detergents, icing inhibitors, and thermal stability additives. The precise chemical composition of the additives may be in the SDS, the fuel specification, or proprietary to the manufacturer.

become part of the product. Other chemicals that may come under “otherwise used” are process lubricants, metal working fluids, coolants, refrigerants, hydraulic fluids, degreasers, cleaners, fuels, and waste treatment chemicals.

There are over 650 chemicals and 30 chemical categories that may require reporting if released or otherwise managed over the thresholds (stated previously). This list of toxic chemicals can be found in 40 CFR 372.65 or EPA’s reference document, “List of Lists.” The list of toxic chemicals is periodically updated and is printed yearly in the *Toxic Chemical Release Inventory Reporting Forms and Instructions*; these documents also can be downloaded from the EPA TRI home page. *Exhibit 12–2* lists common TRI chemicals found in fuels.

When determining whether a threshold for a toxic chemical has been exceeded, you must consider pure forms and the amounts of that toxic chemical in mixtures. Analytical data and SDSs for your facility’s products can be used when making these determinations. The amount of a chemical contained in mixtures is determined by multiplying the percent composition by the total weight of the mixture. If you do not have specific information on the toxic chemicals in the petroleum product at your facility, use the default values provided in [Appendix 12-3](#).

An estimate of how much jet fuel (as well as other petroleum products) must be processed to exceed the 25,000 lb reporting threshold for certain toxic chemicals are found in [Appendix 12-4](#).

EXHIBIT 12–2 EPCRA Section 313 Chemicals Commonly Processed or Otherwise Used by Petroleum Bulk Storage Facilities

Type	Chemical
Gasoline	benzene, ethylbenzene, methyl tert butyl ether (MTBE), n-hexane, toluene, 1,2,4-trimethylbenzene, xylene (mixed isomers)
No. 6 Fuel Oil	hydrogen sulfide, naphthalene
Crude Oil	benzene, n-hexane, xylene (mixed isomers)
No. 2 Fuel Oil/Diesel Fuel	n-hexane, 1,2,4-trimethylbenzene
Lubricating Oils	zinc compounds
Aviation Gas	benzene, toluene, xylene (mixed isomers)
Jet Fuel (JP-4)	benzene, cyclohexane, n-hexane, toluene, xylene (mixed isomers), ethylbenzene
JP-5	naphthalene, 1,2,4-trimethylbenzene, xylene
JP-8/Jet A	naphthalene, 2-methoxyethanol, 1,2,4-trimethylbenzene, benzene

12.2.5.2 TRI Reports

You’re required to submit a separate TRI form (Form R) to EPA and the state agency by July 1 of every year for *each* toxic chemical manufactured, processed, or otherwise used in excess of the specific threshold in the previous calendar year. DoD Instruction (DoDI) 4715.4, *Pollution Prevention*, requires that you submit a copy of your Form R to the Office of the Deputy Under Secretary of Defense.

EPA provides a web-based application that enables facilities to file a paperless TRI report, significantly reducing data errors and allowing instant receipt confirmation of submissions. “Toxics Release Inventory – Made Easy Web” (TRI–MEweb) requires no downloads or software installs and is EPA’s required method for reporting toxic chemical releases under the TRI program. All states accept the TRI–MEweb electronic submission.

The Form R reports reflect total releases, both routine and accidental, during the previous calendar year (for example, July 1, 2019, for activities during the period from January 1 to December 31, 2018). The types of releases that must be reported are:

- Point emissions from stacks
- Fugitive emissions (loading losses, spills, equipment leaks)
- Wastewater discharges
- Discharge into on-site underground injection wells
- On-site land disposal
- Off-site waste transfers or shipments
- On-site waste treatment
- On-site recycling and energy recovery processes

You are required to report any source reduction and recycling efforts for these chemicals. Several techniques may be used to estimate releases, such as analysis of monitoring data, mass balance calculations, use of emission factors, and calculations based on engineering equations and judgment. The EPA Form R instructions provide several examples of calculations used to estimate releases. Here is some of the information you may need to complete your Form Rs:

- Annual inventory/shipping data
- Safety Data Sheets
- Waste disposal records and manifests
- Analytical data
- Purchasing records from suppliers
- Process flow diagrams
- Process throughput quantities and flow rates
- Spill reports
- NPDES permits and discharge monitoring reports
- Hazardous waste generator report
- Tier II reports
- Previous years’ Form R Reports

Once submitted, you must keep on-site a copy of each Form R filed and the supporting documents, calculations, and worksheets used to complete the form for at least 5 years.



Did You Know?

DoDI 4715.4 requires that you also submit your Form R to the Deputy Under Secretary of Defense for Environmental Security (DUSD(ES)).

12.3 Hazardous Waste Generator Reports

As mentioned in [Chapter 7, Hazardous and Recycled Waste](#), you must determine the quantity of hazardous waste generated per month and meet the corresponding generator requirements for managing the waste. Based on the monthly quantity of hazardous waste generated, your facility will fall under one of three categories: a large quantity generator (LQG), a small quantity generator (SQG), or a very small quantity generator (VSQG). Federal regulations (40 CFR 262) require LQGs of hazardous waste to submit a biennial report on EPA Form 8700–13 A to EPA by March 1 of every even-numbered year.

This report includes only the hazardous wastes generated during the previous calendar (odd-numbered) year.

Most states have been granted the authority to administer the hazardous waste regulations, and many states require annual instead of biennial hazardous waste reporting (refer to [Appendix 7–4](#) in [Chapter 7, Hazardous and Recycled Waste](#)). Some states may require SQGs or VSQGs to submit an annual or biennial report.

Some states have their own forms for hazardous waste reporting. Be sure to contact your state agency or refer to your state regulations to determine when and whether you are required to submit a hazardous waste report. The state agency will mail you the forms and an instruction book for completing them.

The hazardous waste report consists of completing specific forms pertaining to the facility's hazardous waste activities during the previous calendar year. For each report, you'll need to provide the following information:

- General facility information (facility's EPA identification [ID] number, name, address, land type, contacts, waste activities, waste codes)
- EPA ID number of each hazardous waste transporter used throughout the year
- EPA ID number and address of each treatment, disposal, or recycling facility that received the waste
- Descriptions and quantities of each hazardous waste generated and shipped off-site

You must keep a copy of each annual or biennial report at the facility for at least 3 years.

In addition, the EPA requires that the generator update the facility's Notification of RCRA Subtitle C Activity (EPA form 8700–12) form when site contact, hazardous waste generator status or waste code information changes. Some states require an annual update of this form, and some states require annual fee payments.

12.4 Wastewater Monitoring Reports

As mentioned in [Chapter 9, Wastewater and Stormwater](#), facilities that discharge wastewater to public waterways, such as streams, rivers, wetlands, and lakes, must have a permit for these discharges. These permits are issued under the



Don't Forget...

It is a good practice to document your weekly hazardous waste container inspections.

NPDES program or corresponding state program. To ensure compliance with the terms of the permit, monitoring, and reporting may be required on a case-by-case basis.

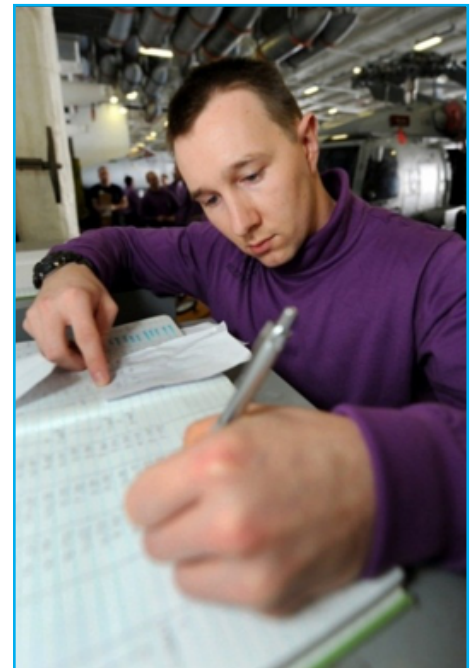
The monitoring and reporting sections in NPDES permits specify the types and frequencies for chemical, physical, and biological analyses that must be performed on wastewater samples. Results of these analyses must be reported to the permitting agency on a regular basis using a discharge monitoring report (DMR) or equivalent state form. The EPA is using an online reporting tool called Network Discharge Monitoring Report (NetDMR); some states use this tool while other states have their own online reporting tools. The frequency of monitoring can be monthly, quarterly, semiannually, or annually and is determined on a case-by-case basis, depending on the nature and effect of the discharge. Results from any monitoring, in addition to that required in the permit, must also be submitted to the regulatory agency. The monitoring data are used by the agency to determine if the wastewater discharges are in compliance with permit limits.

12.5 Stormwater Monitoring Reporting

As mentioned in [Chapter 9, Wastewater and Stormwater](#), most states are authorized to implement the NPDES stormwater permitting program. EPA remains the permitting authority in a few states, territories, and tribal nations. Each state general or individual stormwater permit has different requirements for collecting and analyzing samples of stormwater runoff and how monitoring data should be reported. The specific requirements are tied to the industrial activity at a facility, or the facility's industrial sector. Most permits require routine stormwater inspections, as well as additional inspections before, during, and after certain rain events. In addition to inspections, there could be stormwater monitoring requirements for oil and grease, suspended solids, metals, and other pollutants. For instance, facilities subject to EPA's Multi Sector General Permit (MSGP) must submit to EPA all monitoring data collected no later than 30 days after receiving complete lab results for all monitored outfalls. EPA requires the following MSGP forms be submitted electronically unless granted a waiver from the EPA Regional Office:

- Notice of Intent (NOI)
- Change NOI
- Annual report
- Notice of Termination (NOT)
- DMR
- Conditional No Exposure Certification (NOE)

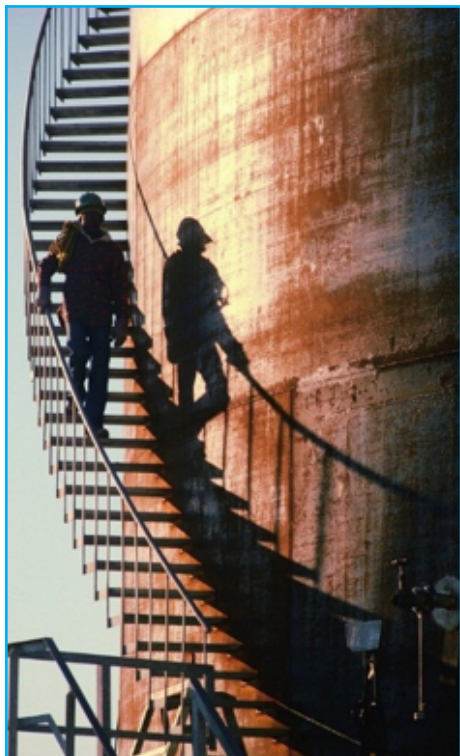
In addition, EPA and some state agencies require an annual stormwater compliance review and submittal of an annual report (by January 30 for the previous calendar year) summarizing sampling and analysis results, documentation of visual observations, the effectiveness of stormwater controls and best management practices, and identification of any unauthorized stormwater discharges. Some states also require submittal and agency approval of the facility's Stormwater Pollution Prevention Plan (SWPPP).



General stormwater permits for construction activities can also have requirements similar to industrial stormwater permits. Be sure to check your facility's industrial and construction stormwater permit and SWPPP for reporting requirements and contact your state agency to see if they have specific forms or electronic reporting tools for uploading monitoring results.

12.6 Air Emissions Reporting Requirements

DLA Energy facilities can be subject to several types of air quality-related reporting requirements. In addition to reporting requirements associated with operating permits, there are reporting requirements for storage tanks subject to New Source Performance Standards (NSPS) and for bulk gasoline terminals subject to either NSPS or National Emission Standards for Hazardous Air Pollutants (NESHAP). Most state and regional air permitting programs also require facilities to submit air emission reports (sometimes called emissions inventories) for the purpose of license fee collection. A summary of air quality-related reporting requirements is presented in the following paragraphs. Refer to [Chapter 6, Air Emissions](#) for details on the air quality regulations.



12.6.1 NSPS Reporting Requirements

NSPS emissions standards applicable to a tank depend on the date that the tank was constructed, reconstructed, or last modified; the tank capacity; and the type of petroleum liquid that is stored in the tank. NSPS monitoring, recordkeeping, and reporting requirements also depend on these factors.

Sources subject to an NSPS standard are subject to reporting requirements specified in the General Provisions (40 CFR 60 Subpart A) and to reporting requirements specified in the applicable Subparts K, Ka, Kb, XX, IIII, or JJJJ.

12.6.1.1 NSPS General Provisions

The General Provisions of NSPS regulations specify notification requirements for sources subject to any subpart of NSPS. In general, you must notify EPA and your state or regional air quality agency:

- Within 30 days of the anticipated date source construction is planned to begin
- Between 30 to 60 days before initial startup
- Within 15 days after the actual startup date
- Within 60 days of beginning any physical or operational changes to the tank or terminal that may increase emissions

You should consult 40 CFR 60.7 (Subpart A) to find specific reporting requirements and to confirm which reporting requirements apply to your facility.

12.6.1.2 NSPS Subparts K and Ka – Volatile Organic Liquid Storage Vessels Including Petroleum Storage Vessels (1973–1984)

Petroleum liquid storage tanks subject to Subparts K and Ka are not required to submit any reports to EPA or the state or regional agency, other than reports required under the General Provisions of Subpart A. However, sources are

required to keep records at their facility, and these records must be available to agencies upon inspection of the tank or upon request. Required records include documenting petroleum liquid stored, period of storage, and maximum true vapor pressure of the liquid during its period of storage. These records must be maintained for at least 2 years from the date of measurement (or 5 years if your facility has a Title V operating permit).

12.6.1.3 NSPS Subpart Kb – Volatile Organic Liquid Storage Vessels Including Petroleum Storage Vessels

Volatile organic liquid storage tanks subject to Subpart Kb are required to submit reports to EPA and the applicable state or regional air quality agency in addition to reports required under the General Provisions of Subpart A. The types of reports required depend on whether the tank is equipped with a fixed or internal floating roof, an external floating roof, or a vapor collection and control device. Some of the reporting requirements include:

- Certifying that control equipment installed for fixed-roof, internal floating-roof, or external floating-roof tanks meets the required specifications
- Submitting a report within 30 days if the internal floating roof is not operating properly
- Describing repairs to torn seals on fixed-roof or internal floating-roof tanks within 30 days
- Notifying 30 days in advance of any seal gap measurements for external floating-roof tanks and submitting the results within 60 days after the measurement
- For vapor collection and control devices, submitting specific measurement results within 6 months of initial startup
- For vapor collection and control devices, submitting semiannual reports listing periods of operation during which the device was not operational

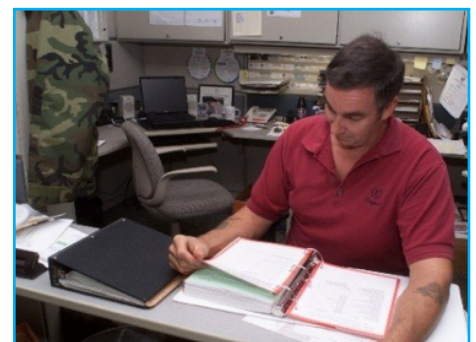
Sources subject to this subpart are required to keep records at their facility, and these records must be available to agencies upon inspection of the source or upon request. Required records include documentation of petroleum liquid stored, period of storage, maximum true vapor pressure of the liquid during its period of storage, tank inspection records and reports, seal gap measurements taken, and all maintenance performed.

These records must be maintained for at least 2 years (or 5 years if your facility has a Title V operating permit) from the date of measurement, maintenance, or repair.

Consult 40 CFR 60.115b (Subpart Kb) to find specific reporting and recordkeeping requirements, and to confirm which requirements apply to your facility.

12.6.1.4 NSPS Subpart XX — Bulk Gasoline Terminals

Bulk gasoline terminals subject to Subpart XX are not required to submit any reports to EPA or the delegated state or regional agency, other than reports required under the General Provisions of Subpart A; however, sources are required



to keep records at their facility, and these records must be available to agencies upon inspection of the source or upon request. Required records include:

- Vapor tightness
- Gasoline delivery tank pressure tests for all trucks that use the facility, updated annually
- Monthly leak inspection records
- Notifications of non-vapor-tightness to gasoline tank trucks that use the facility
- Records of modifications, maintenance, or repair to the vapor collection and control system

These records must be maintained for at least 2 years from the date of measurement and 3 years from the date of modification, maintenance, or repair (or 5 years if your facility has a Title V operating permit).

You should consult 40 CFR 60.505 (Subpart XX) to find specific reporting and record-keeping requirements and to confirm which requirements apply to your facility.

12.6.1.5 NSPS Subpart IIII — Stationary Compression Ignition Internal Combustion Engines

Stationary compression ignition internal combustion engines (CI ICE) subject to this regulation (40 CFR 60.4200) require manufacturer certification of all engines, except “very large” engines (units with over 30 liters/cylinder displacement). You will need to install, configure, operate, and maintain the engine according to the specifications and instructions provided by the engine manufacturer.

If you have pre-2007 model year engines with a displacement that is less than 30 liters per cylinder and Tier 1 fire pump engines subject to the rule, then you can demonstrate compliance by purchasing an engine that is certified to meet the non-road emission standards for the model year and maximum engine power of the engine. To demonstrate compliance with the emission standards, you can use other information, such as:

- Performance test results for each pollutant for a test conducted on your engine or a similar engine
- Data from the engine manufacturer
- Data from the control device vendor

Engine manufacturers and/or control device vendors may provide this information at the time of sale in the form of a Certificate of Conformity. If you choose to conduct a performance test to demonstrate compliance with the subpart, the test must be conducted according to the regulations of 40 CFR 1039, Subpart F. Regardless, you must keep the records that indicate that the engine is complying with the emission standards. These records need to be available for inspection by the enforcing agency.

You will need to provide initial notification to the state and EPA if you have non-emergency engines greater than 3,000 horsepower (hp) or with a



displacement of greater than or equal to 10 liters per cylinder. You'll also need to provide notification if you have non-emergency stationary pre-2007 model year engines greater than 175 hp that are not certified. The initial notification for both situations includes:

- Name and address of the owner or operator
- Address of the engine
- Engine make, model, engine family, serial number, model year, maximum power, and displacement
- Emission control equipment
- Fuel used

If you modify or reconstruct an engine and it becomes subject to this regulation, then you will need to conduct an initial performance test on the engine as described above. You may need to apply for an air construction permit with the designated agency for this engine.

If you have very large engines (units with over 30 liters/cylinder displacement), then you will need to conduct an initial performance test to demonstrate compliance with the emissions reductions requirements and establish operating parameters and monitor operating parameters continuously. If you have large, non-emergency engines, then you must conduct annual performance tests.

Required records for engines subject to this subpart include:

- All notifications submitted to comply with this subpart and all documentation supporting any notification.
- Maintenance conducted on the engine.
- For non-certified engines, demonstration of compliance with the emission standards for non-certified engines as described previously.
- For certified engines, documentation from the manufacturer that the engine is certified to meet the emission standards.
- For emergency engines, records of hours of operation, as recorded through the non-resettable hour meter. You must record the time of operation and the reason the engine was in operation during that time.

If you operate an emergency engine that is engaged in an emergency demand response program, additional recordkeeping and reporting requirements may apply. [Chapter 6, Air Emissions](#) contains additional information concerning operating requirements for emergency engines.



12.6.1.6 NSPS Subpart JJJJ — Stationary Spark Ignition Internal Combustion Engines

Stationary spark ignition internal combustion engines (SI ICE) subject to 40 CFR 60.4230 (Subpart JJJJ) must be certified by the manufacturer to meet applicable emission standard and must be installed, configured, operated, and maintained according to the specifications and instructions provided by the engine manufacturer. If your engine is not certified by the manufacturer or you do not operate and maintain a certified engine and associated control devices according to the

manufacturer's written specifications and instructions, you must demonstrate compliance via other requirements specified in Subpart JJJJ, which may include stack testing, conducting specific maintenance, and/or operating within specific time limits. These requirements vary depending on the size and use of the engine.

You must keep records of the following information:

All notifications submitted and supporting documentation to comply with this subpart:

- Maintenance conducted on each engine
- Engine manufacturer's certifications
- If an engine is not certified or is operating in a non-certified manner, documentation that the engine meets the emission standards

If you operate a stationary SI ICE greater than or equal to 500 hp manufactured after July 1, 2010, that has not been certified by a manufacturer, you must submit an initial notification. This notification must include:

- Name and address of the owner or operator
- Address of the engine
- Engine make, model, engine family, serial number, model year, maximum power, and displacement
- Emission control equipment
- Fuel used

If you operate a stationary SI ICE in a non-certified manner, you're required to keep a maintenance plan and records of conducted maintenance to demonstrate compliance. If this engine is 100 hp or larger, you'll need to conduct an initial performance test within 1 year of engine startup. If this engine is larger than 500 hp, you'll need to conduct subsequent performance tests every 8,760 hours of operation or 3 years, whichever comes first. Non-emergency engines greater than 500 brake horsepower (bhp) installed after July 1, 2010, are required to have a non-resettable hour meter. Emergency engines greater than or equal to 130 bhp and less than 500 bhp built on or after January 1, 2011, and emergency engines less than 130 bhp built on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines are required to have a non-resettable hour meter.

For those engines classified as emergency backup engines, it is required that the hours of operation be recorded, as reflected by the non-resettable hour meter. Information recorded must include the hour meter reading, duration of operation, and reason for operation. If an engine is engaged in an emergency demand response program, additional recordkeeping and reporting requirements may apply. [Chapter 6, Air Emissions](#) contains additional information concerning operating requirements for emergency engines.

12.6.2 NESHAP Reporting Requirements

NESHAPs generally apply to facilities that emit large quantities of hazardous air pollutants (HAPs). Check with your state or regional air quality agency for their specific list of HAPs since they are free to add additional pollutants to the list. A major source is a facility that has the potential to emit over 10 tons per year (tpy) of any one HAP or over 25 tpy of total HAPs combined. Area sources are defined as stationary source of HAPs that do not meet the definition of major source.

The General Provisions (40 CFR 63 Subpart A), or portions of it, apply to all facilities subject to NESHAP, and Subpart R applies specifically to gasoline distribution facilities.

Subpart EEEE applies to non-gasoline organic liquids distribution, and Subpart ZZZZ applies to stationary reciprocating internal combustion engines (RICE). Reporting requirements for each are outlined in the following sections.

12.6.2.1 NESHAP General Provisions

Agency notification is required for major source facilities that wish to construct, reconstruct, or modify their operations in ways that affect air emissions. Existing stationary RICE at area sources are also subject to notification requirements. In general, you must notify EPA and your air quality agency:

- When you intend to construct a source subject to a subpart under NESHAP (this may be submitted with the construction permit application)
- 120 days after you become subject to this subpart
- Within 60 days before performance testing of any vapor processing system, if required
- By submitting continuous monitoring system (CMS) performance results, if required
- By submitting Title V compliance status reports

New emergency and non-emergency engines greater than 500 bhp at major sources are required to submit only an initial notification and are otherwise exempt from requirements of this NESHAP. The initial notification should include the initial notification information and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion.

Be sure to consult 40 CFR 63.9 (Subpart A) to find specific reporting and record-keeping requirements and to confirm which requirements apply to your facility.

12.6.2.2 NESHAP Subpart R – Gasoline Distribution Facilities

Bulk gasoline terminals are defined as facilities that receive gasoline by pipeline, ship, or barge with a throughput of 20,000 gallons per day and associated pipeline breakout stations. Subpart R of 40 CFR 63 applies to gasoline distribution facilities and pipeline breakout stations that are major sources of HAPs themselves or are located within or adjoining a larger facility that is a major source of HAP emissions. Sources subject to this subpart are required to submit reports to EPA or the delegated agency in addition to reports required under the General



Provisions of Subpart A. Some of the reporting and recordkeeping requirements for gasoline terminals consist of:

- Initial notification submitted to EPA or the designated agency of the type, identification number, and location for all gasoline equipment 1 year after an affected source becomes subject to the provisions of this subpart
- Records of the test results for each gasoline cargo tank, including annual certification testing and continuous performance testing
- Records of monthly inspections (sight, sound, and smell) of all gasoline service equipment for leaks
- Documentation of the date and method of repairing equipment leaks
- Reports submitted to EPA or the designated agency noting occurrence of any excess emissions
- Continuous monitoring data with specific operating parameters for control devices (such as flares, thermal oxidation systems, refrigerated condensers, carbon adsorption systems)
- Semiannual reports for vapor collection and control devices listing periods during terminal operation when the device was not working

As with many other reports, you're required to keep records at your facility, and these records must be available to federal and state agencies upon inspection. You must maintain the records on-site for at least 5 years from the date of measurement, maintenance, or repair. Consult 40 CFR 63.428 (Subpart R) and your air permit to find specific reporting and recordkeeping requirements and to confirm which requirements apply to your facility.

12.6.2.3 NESHAP Subpart EEEE – Organic Liquids Distribution (Non-Gasoline) Facilities

Non-gasoline distribution facilities regulated under 40 CFR 63.2330 (Subpart EEEE) are those that distribute organic liquids other than gasoline that are major sources of HAP emissions by themselves or are located within or adjoining a larger facility that is a major source of HAP emissions and that are not regulated by another NESHAP. Under this rule, gasoline, aviation gasoline, kerosene (No. 1 distillate oil), diesel (No. 2 distillate oil), asphalt, and heavier distillate oils and fuel oils are excluded. This subpart applies to liquefied natural gas storage and pressure pipelines. In addition, HAP materials, such as oxygenates like MTBE, used in fuel blending and hydrazine or other missile fuels could be regulated by Subpart EEEE.

Some of the reporting and recordkeeping requirements for the organic liquid distribution facilities include:

- Initial notification submitted to EPA or the designated agency of NOI to construct, reconstruct, or start operations
- Notification of Compliance Status to EPA or the designated agency if you are required to conduct a performance test, design evaluation, or other initial compliance demonstration



- Notice of an upcoming performance test to EPA or the designated agency if you are required to conduct a test
- Records on the CMS for controlled sources
- A compliance report every 6 months to EPA or the designated agency to report emission deviations, malfunctions, CMS information, and related information regarding the affected sources
- Documentation of sources, such as tanks and transfer racks, that are not required to be controlled
- Written startup, shutdown, and malfunction plan for controlled sources
- Transport vehicles must have a current certification in accordance with the DOT pressure test requirements of 49 CFR 180 for cargo tanks and 49 CFR 173.31 for tank cars

You should consult the regulation for specific reporting and recordkeeping requirements, operating limits, and work practice standards for HAPs emitted from organic liquids distribution (non-gasoline) operations at major sources of HAP emissions.

12.6.2.4 NESHAP Subpart ZZZZ – Stationary Reciprocating Internal Combustion Engines

Stationary RICE may be fueled by gasoline, diesel fuel, natural gas, and other types of fuels. If you are subject to this rule (40 CFR 63.6580), you must submit all of the applicable notifications as listed in the NESHAP General Provisions (40 CFR 63, Subpart A), summarized previously, which includes an initial notification, notification of performance test or evaluation, and a notification of compliance for each stationary RICE that must comply with the specified emission and operating limitations. In addition, you must submit an initial notification for each of the following:

- An existing stationary RICE with site rating of less than or equal to 500 bhp located at a major source
- An existing stationary RICE located at an area source
- A stationary RICE with a site rating of more than 500 bhp located at a major source
- A new or reconstructed four-stroke lean burn (4SLB) stationary RICE rated at 250 bhp or greater located at a major source

Notifications are not required for existing stationary RICE less than 100 hp, existing stationary emergency RICE, or existing stationary RICE that are not subject to any numerical emission standards.

When, and if, the notifications are due depends on the type, size, and location of the RICE and when it is started up.

You must record all data necessary to demonstrate you are in compliance with the emission limitations and operating limitations (if applicable) as required by the regulation. Your records must be in a form suitable and readily available for review. You must also keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

Records must remain on-site for at least 2 years and then can be maintained off-site for the remaining 3 years.



You must submit a compliance report semiannually or, if your RICE is a limited use engine subject to numerical emission limits or a new or reconstructed non-emergency RICE that combusts landfill gas or digester gas equivalent to 10% or more of the gross heat input, you must submit a compliance report annually. This report should contain information including company name and address, a statement by a responsible official that the report is accurate, and a statement of compliance or documentation of any deviation from the requirements of the regulation during the reporting period.

If you operate and maintain an engine solely for emergency purposes, you must equip the engine with a non-resettable hour meter and record the hour reading at the time of operation, the duration the engine operated, and the reason for operation. Additionally, if the emergency engine is engaged in an emergency demand response program, then additional recordkeeping and reporting requirements apply. [Chapter 6, Air Emissions](#) contains additional information concerning operating requirements for emergency engines.

12.6.3 Risk Management Plan Reporting

The chemical accident prevention provisions (40 CFR 68) require facilities that produce, handle, process, distribute, or store certain chemicals to develop a Risk Management Program, prepare a Risk Management Plan (RMP), and submit the RMP to EPA. Refer to [Chapter 1, Environmental and Emergency Response Planning](#) for more information on RMPs. Software called RMP*eSubmit continues to be the method for facilities to use for online RMP reporting. RMPs must be fully updated and resubmitted once every 5 years. States may choose to implement the chemical accident prevention program, so check with your state on their applicability and reporting requirements.

12.6.4 Annual Emissions Inventory Reporting

Most air quality agencies require reporting of emissions from both permitted and unpermitted sources. Some sources are exempt from permitting but may *not be exempt* from annual emissions inventory requirements. DLA Energy facilities should expect to report emissions from all fuel storage tanks, **vapor control systems**, and **flares**. Many agencies also may require estimating emissions from:

- Normal leakage of valves, pump seals, flanges, and connectors
- Loading and unloading
- Cleaning and maintenance, such as blowing out pipes
- Spills
- Small sources exempt from permitting requirements

Actual testing of emissions sources (stack sampling or continuous emissions monitoring) is sometimes required to demonstrate environmental compliance. Most agencies allow emissions test results to be used for determining annual emissions and license fees.

Some state agencies require annual fees to be based on maximum allowable (permitted) emissions. Tools to estimate emissions and prepare inventories are discussed in [Appendix 6–4](#) in [Chapter 6, Air Emissions](#). Be sure to consult the regulations of your specific agency to determine acceptable inventory reporting and emissions fee determination requirements and methods.

12.6.5 Title V Compliance Certification Reports

As mentioned in [Chapter 6, Air Emissions](#), if your facility is separate from a DoD installation, it is likely below the Title V major source emission threshold. However, if your facility is a tenant on a DoD installation that has emissions in aggregate that exceed the thresholds, then your facility would be considered part of a major source and must be included in the installation's Title V operating permit. Facilities with Title V operating permits are required to submit records of monitoring results and operating data (such as fuel throughput) periodically to EPA and the designated agency. Frequency of reporting is often annual, semiannual, or quarterly.

For major DLA Energy facilities, periodic reporting frequency and requirements will be detailed in the installation Title V operating permit and will consist of reports required under NSPS and NESHAP regulations. Periodic compliance reports must include a compliance certification statement signed by the installation responsible official, declaring that all reported information is true, accurate, and complete. In addition, Title V operating permits require facilities to promptly report deviations from permit conditions to the air agency (such as exceeding emissions limits during operational upsets).

12.6.6 Greenhouse Gas Reporting

In 2009, EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule (MRR) in 40 CFR 98, which required various facilities, including facilities that combust fuels in stationary sources, to submit annual reports of their greenhouse gas (GHG) emissions to EPA if they emit 25,000 tpy or more of carbon dioxide equivalent (CO₂e) emissions. In addition to facilities that emit greater than 25,000 tpy CO₂e of GHG, suppliers of certain products are required to submit an annual report of GHG emissions regardless of the quantity of GHG that is emitted annually. This includes suppliers of petroleum products, natural gas, and natural gas liquids.

The gases covered by the rule are carbon dioxide (CO₂), methane (CH₄), nitrogen dioxide (N₂O), hydrofluorocarbon (HFC), perfluorinated compound (PFC), sulphur hexafluoride (SF₆), and other fluorinated gases including nitrogen trifluoride and hydrofluorinated ethers reported in CO₂e. In most cases, DLA Energy facilities are unlikely to have regulated sources that emit any of the fluorinated gases (HFC, PFC, SF₆, nitrogen trifluoride, and hydrofluorinated ethers). DLA Energy facilities are unlikely to emit CH₄ or N₂O except as by-products of combustion, in which case the CO₂e emissions are generally less than 1% of the CO₂ emissions from such combustion.

For evaluating the applicability of EPA's MRR requirement (that is, comparing to the 25,000 tpy threshold), facilities include only the emissions from listed source categories; none of the listed categories include Scope 2 or Scope 3 emissions or mobile sources (for example, vehicles). According to the EPA, Scope 2 emissions



are GHG emissions resulting from the generation of electricity, heat, or steam purchased by a Federal Agency and Scope 3 emissions are GHG emissions from sources not owned or directly controlled by a Federal Agency, but related to agency activities.

The rule currently contains 42 categories of sources that must be reported, but the majority are industrial processes that don't apply to DLA Energy facilities (for instance, petroleum refineries or nitric acid production). Electricity production is a listed source category, but this is intended to cover large stationary combustion sources that are regulated under EPA's existing acid rain program.

Applicability of the rule for some source categories is based on source capacity or throughput and not comparison of calculated GHG emissions to the 25,000 tpy threshold. For example, industrial waste landfills are regulated based on volume of the waste in the landfill, and if MRR applicability is triggered based on the landfill volume, then sources such as stationary combustion must automatically be reported regardless of emissions.

As noted above, suppliers of petroleum and natural gas must report the emissions associated with combustion of those fuels regardless of applicability of the 25,000 tpy threshold, but it is also considered unlikely that these requirements will apply to DLA Energy. For petroleum products, the rule applies to refiners, importers, and exporters; however, the definition of exporter excludes entities that transfer products to U.S. military bases abroad or to ships for onboard use. (Specifically, that definition of export excludes "...any such transport on behalf of the United States military including foreign military sales under the Arms Export Control Act..."). Similarly, DLA Energy is also likely excluded from the natural gas supplier category, as that is limited to "...companies that own or operate distribution pipelines, not interstate pipelines or intrastate pipelines, that physically deliver natural gas to end users and that are regulated as separate operating companies by State public utility commissions or that operate as independent municipally-owned distribution systems..." as stated in 40 CFR 98.

Thus, while you are urged to review the MRR applicability per the EPA website noted in [Section 12.9, For More Information](#) to confirm, in most cases the only MRR source categories applicable to military installations are stationary combustion, municipal waste landfills, and industrial waste landfills.

A DLA Energy facility co-located with a DoD installation that has emissions in aggregate exceeding the reporting threshold of 25,000 tpy of CO₂e would be required to report GHG emissions as part of that facility's GHG annual report.

Note that emissions of biomass fuels (for example, wood or biodiesel) must be reported for regulated facilities the same as fossil fuels (coal, petroleum products, or natural gas). However in determining MRR applicability in comparing to the 25,000 tpy threshold, emissions from biomass fuels are not included in facility totals.

DLA Energy facilities should expect to report GHG emissions from boilers, simple and combined-cycle combustion turbines, non-emergency stationary engines, incinerators, thermal oxidizers, process heaters, municipal solid waste



landfills, and industrial waste landfills. Under this rule, portable equipment, emergency generators, emergency equipment, and open flares do not need to be considered.

Annual reports are submitted online to EPA using an electronic GHG reporting tool called e-GGRT. The tool is web-based and does not require installation of any software. Reports are due March 31 for emissions in the previous calendar year. Facilities must register and name a designated representative (DR) in advance of reporting and can optionally name an alternate designated representative (ADR) and agents to assist. Electronic submittals and hard copy paperwork are required to name the DR, ADR, and agents, so it is advisable to begin the registration process at least 4 weeks prior to the March 31 reporting deadline.

12.7 Pipeline Annual Reports

The DOT Pipeline and Hazardous Materials Safety Administration (PHMSA) regulates the transportation of oil and hazardous liquids in pipelines that leave facility grounds (sometimes called cross-country pipelines). Beginning in 2005, pipeline owners or operators are required to submit an annual report using DOT Form PHMSA F 7000–1.1 by June 15 for the previous calendar year. The form is available from the Office of Pipeline Safety website. This reporting requirement is found in 49 CFR 195.49.

A separate report is required for each system type, meaning separate pipelines transmitting crude oil, highly volatile liquids (including anhydrous ammonia), petroleum and refined products, or carbon dioxide. The information collected on the report consists of:

- Operator's ID number and company information
- Total miles of pipeline in the system at the end of the year
- Integrity inspections conducted and resulting actions taken
- Information on pipe size and break out tanks
- Miles of onshore and offshore cathodically protected steel pipe
- Annual volume of hazardous liquids transported via the pipeline system

Completed annual reports are to be submitted electronically to PHMSA portal (see [Section 12.9, For More Information](#)).

12.8 State Requirements

Many states require or voluntarily allow electronic reporting for various compliance submittals. Under the Cross-Media Electronic Reporting Rule (CROMERR), CROMERR establishes standards for electronic report receiving systems operated by state, tribal and local governments under their authorized programs.



State Requirements

These standards include an application process through which states may gain approval. Most states have been approved for some e-reporting systems. States with e-reporting systems are shown in Exhibit 12-3.

EXHIBIT 12-3
State Routine Environmental Compliance Reporting

State	Agency	System	Program Covered
Alaska	Alaska Department of Environmental Conservation	Air Online Services System (AOS)	Air
		Compliance Monitoring Data Portal (CMDP)	Water
		Water Online Application System (OASys)	Water
		National Network Discharge Monitoring Report System (National NetDMR)	Water
Alabama	Alabama Department of Environmental Management	Air Emissions Electronic Reporting System (AEERS)	Air
		Electronic Environmental Data Exchange Reporting System (E2)	Water - Waste
Arkansas	Arkansas Department of Environmental Quality	Electronic Portal System (e-Portal System)	Water - Waste - Air
		Hazardous Waste Annual Electronic Reporting System (HWARS)	Waste
		National Network Discharge Monitoring Report System (National NetDMR)	Water
		State and Local Emissions Inventory System (SLEIS)	Air
Arizona	Arizona Department of Environmental Quality	Smart Notice of Intent System (SmartNOI)	Water
		State and Local Emissions Inventory System (SLEIS)	Air
		Enterprise System (myDEQ)	Waste - Water - Air
California	California State Water Resources Control Board	California Integrated Water Quality System - Electronic Self-Monitoring Report (CIWQS-eSMR)	Water
		Compliance Monitoring Data Portal (CMDP)	Water
		Storm Water Multiple Application and Report System (SMARTS)	Water
Colorado	Colorado Department of Public Health and Environment	Colorado DPHE Online System (CEOS)	Air - Water - Waste - Chemicals
		Colorado Drinking Water System (CDWS)	Water
		National Network Discharge Monitoring Report System (National NetDMR)	Water
Connecticut	Connecticut Department of Energy and Environmental Protection	Electronic Permitting System (e-Permitting System)	Waste - Air - Water
		National Network Discharge Monitoring Report System (National NetDMR)	Water
	Colorado Department of Public Health & Environment	Compliance Monitoring Data Portal (CMDP)	Water
Delaware	Delaware Department of Natural Resources & Environmental Control	Online Reporting System (ORS)	Air
		Online Reporting System (ORS)	Waste - Water - Air
		State and Local Emissions Inventory System (SLEIS)	Air
	Delaware Division of Public Health	Electronic Sample Entry Verify (eSE Verify)	Water
Florida	Florida Department of Environmental Protection	Electronic Reporting System (e-Reporting System)	Air - Water - Waste
		NPDES e-Reporting Tool (NeT)	Water

State	Agency	System	Program Covered
Georgia	Georgia Department of Natural Resources	Georgia Environmental Protection Division Online System (GEOS)	Water - Waste - Air - Toxic Substances
		National Network Discharge Monitoring Report System (National NetDMR)	Water
Hawaii	Hawaii Department of Health	Electronic Permitting Portal (e-Permitting Portal)	Water - Air - Waste - Toxic Substances
		Compliance Monitoring Data Portal (CMDP)	Water
		National Network Discharge Monitoring Report System (National NetDMR)	Water
		State and Local Emissions Inventory System (SLEIS)	Air
Iowa	Iowa Department of Natural Resources	Asbestos Notification System (ANS)	Air
		State and Local Emissions Inventory System (SLEIS)	Air
Idaho	Idaho Department of Environmental Quality	National Network Discharge Monitoring Report System (National NetDMR)	Water
		NPDES Electronic Reporting System	Water
		Point Source Survey Tool (POSST)	Air
		Compliance Monitoring Data Portal (CMDP)	Water
Illinois	Illinois Environmental Protection Agency	Asbestos Electronic Reporting System	Chemicals
		National Network Discharge Monitoring Report System (National NetDMR)	Water
		Electronic Annual Emissions Report System (eAER)	Air
		NPDES e-Reporting Tool (NeT)	Water
		Safe Drinking Water Information System Lab to State (SDWIS/Lab to State)	Water
Indiana	Indiana Department of Environmental Protection	Electronic Authentication System (eAuth)	Air - Water - Waste
		Electronic Sample Entry Verify (eSE Verify)	Water
		National Network Discharge Monitoring Report System (National NetDMR)	Water
Kansas	Kansas Department of Health and Environment	Kansas Environmental Application Portal (KEAP)	Air - Waste - Water
		Compliance Monitoring Data Portal (CMDP)	Water
		State and Local Emissions Inventory System (SLEIS)	Air
Kentucky	Kentucky Department for Environmental Protection	Electronic Reporting System (ERS)	Water - Waste - Air
		National Network Discharge Monitoring Report System (National NetDMR)	Water
Louisiana	Louisiana Department of Environmental Quality	National Network Discharge Monitoring Report System (National NetDMR)	Water
	Louisiana Department of Health	Compliance Monitoring Data Portal (CMDP)	Water
		StarLIMS	Water
Massachusetts	Department of Environmental Protection	Underground Storage Tanks System	Waste
Maryland	Maryland Department of the Environment	National Pollutant Discharge Elimination System e-Permits (NPDES e-Permits)	Water
		National Network Discharge Monitoring Report System (National NetDMR)	Water

State	Agency	System	Program Covered
Maine	Maine Department of Environmental Protection	Maine Air Emissions Inventory System (MAIRIS)	Air
		National Network Discharge Monitoring Report System (National NetDMR)	Water
Michigan	Michigan Department of Environmental Quality	Michigan Air Emission Reporting System (MAERS)	Air
		MiWaters	Water
Minnesota	Minnesota Department of Health	Compliance Monitoring Data Portal (CMDP)	Water
	Minnesota Pollution Control Agency	Regulatory Services Portal (RSP)	Air - Water - Waste
Missouri	Missouri Department of Natural Resources	Electronic Discharge Monitoring Report System (eDMR)	Water
		Enterprise System	Air - Waste - Water - Chemicals
Mississippi	Mississippi Department of Environmental Quality	National Network Discharge Monitoring Report System (National NetDMR)	Water
		Hazardous Waste Biennial Reporting System (HWBR)	Waste
		Regulatory Services Portal (RSP)	Water - Air
Montana	Montana Department of Environmental Quality	Compliance Monitoring Data Portal (CMDP)	Water
		Fees, Applications and Compliance Tracking System (FACTS)	Water
		National Network Discharge Monitoring Report System (National NetDMR)	Water
North Carolina	North Carolina Department of the Environment and Natural Resources	Electronic Discharge Monitoring Report System (eDMR)	Water
		Integrated Build Environment for Application Management (IBEAM)	Air
		Safe Drinking Water Information System Lab to State (SDWIS/Lab to State)	Water
North Dakota	North Dakota Department of Health	Electronic Reporting Information System (ERIS)	Air - Water - Waste
Nebraska	Nebraska Department of Environmental Quality	National Network Discharge Monitoring Report System (National NetDMR)	Water
	Nebraska Department of Health and Human Services	Compliance Monitoring Data Portal (CMDP)	Water
New Hampshire	New Hampshire Department of Environmental Services	Compliance Monitoring Data Portal (CMDP)	Water
		State and Local Emissions Inventory System (SLEIS)	Air
New Jersey	New Jersey Department of Environmental Protection	Electronic Reporting System (E2)	Water
		Regulatory Services Portal (RSP)	Air - Water - Waste
New Mexico	New Mexico Environment Department	Tools, Maps, and Links Webpage	Air - Water
		Compliance Monitoring Data Portal (CMDP)	Water
Nevada	Nevada Division of Environmental Protection	Compliance Monitoring Data Portal (CMDP)	Water
		Network Discharge Monitoring Report System (State NetDMR)	Water

State	Agency	System	Program Covered
New York	New York State Department of Environmental Conservation	Air Compliance and Emission Electronic Reporting System (ACERS)	Air
		Hazardous Waste Annual Reporting System (HWARS)	Waste
		National Network Discharge Monitoring Report System (National NetDMR)	Water
Ohio	Ohio Environmental Protection Agency	Electronic Business Center (e-Business Center)	Air - Water - Waste
Oklahoma	Oklahoma Department of Environmental Quality	Electronic Document Receiving System (EDRS)	Air - Water - Waste
Oregon	Oregon Department of Environmental Quality	Environmental Data Management System (EDMS)	Water - Air - Waste - Chemicals
		National Network Discharge Monitoring Report System (National NetDMR)	Water
		NPDES e-Reporting Tool (NeT)	Water
	Oregon Health Authority	Compliance Monitoring Data Portal (CMDP)	Water
Pennsylvania	Pennsylvania Department of Environmental Protection	Compliance Monitoring Data Portal (CMDP)	Water
Rhode Island	Rhode Island Department of Environmental Management	National Network Discharge Monitoring Report System (National NetDMR)	Water
	Rhode Island Department of Health	Compliance Monitoring Data Portal (CMDP)	Water
South Carolina	South Carolina Department of Health and Environmental Control	Compliance Monitoring Data Portal (CMDP)	Water
		Enterprise e-Permitting System	Air - Water - Waste - Chemicals
		State and Local Emissions Inventory System (SLEIS)	Air
South Dakota	South Dakota Department of the Environment and Natural Resources	National Network Discharge Monitoring Report System (National NetDMR)	Water
		NPDES e-Reporting Tool (NeT)	Water
Tennessee	Tennessee Department of Environment and Conservation	Compliance Monitoring Data Portal (CMDP)	Water
		National Network Discharge Monitoring Report System (National NetDMR)	Water
		State and Local Emissions Inventory System (SLEIS)	Air
Texas	Texas Commission on Environmental Quality	State Network Discharge Monitoring Report System (State NetDMR)	Water
		State of Texas Environmental Electronic Reporting System (STEERS)	Water - Air - Waste
Utah	Utah Department of Environmental Quality	National Network Discharge Monitoring Report System (National NetDMR)	Water
		NPDES e-Reporting Tool (NeT)	Water
		Compliance Monitoring Data Portal (CMDP)	Water
Virginia	Virginia Department of Environmental Quality	Electronic Environmental Data Exchange Reporting System (E2)	Water

State	Agency	System	Program Covered
The United States Virgin Islands	The United States Virgin Islands Department Of Planning & Natural Resources	National Network Discharge Monitoring Report System (National NetDMR)	Water
	The United States Virgin Islands Department of Health	Compliance Monitoring Data Portal (CMDP)	Water
Vermont	Vermont Department of Environmental Conservation	Compliance Monitoring Data Portal (CMDP)	Water
		Agency of Natural Resources Online System (ANR Online)	Water-Air-Waste
Washington	Washington State Department of Health	Washington State Lab Electronic Reporting System (WSLERS)	Water
	Washington State Department of Ecology	Generic CROMERR Solution	Air - Water
		Turbowaste.net	Waste
West Virginia	West Virginia Department of Environmental Protection	Environmental Submission System (ESS)	Air - Waste - Water
	West Virginia Department of Health and Human Resources	Drinking Water Program Electronic Data Receiving System	Water
Wyoming	Wyoming Department of Environmental Quality	Environmental Information Technology Enterprise System (ENV-ITE)	Waste - Water - Air

Some states require report submittal more frequently than federal requirements. Be sure to contact your state agency for their reporting requirements. Refer to [Appendix E](#) for state agency contact information. For instance, some state-specific requirements include:

- In California, the online Storm Water Multiple Application and Report Tracking System (SMARTS) is used to submit the notice of intent, notice of termination, annual reports, application/renewal fees, and other discharger submitted documents related to stormwater permits. Waste managers may report electronically at: <https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.xhtml>
- Many states accept Tier2 Submit, the EPA's Tier II reporting software available for free download from the EPA website. Other states have their own electronic forms.
- States have the authority to impose more stringent TRI requirements, and some states have done so (for example, Arizona, Nevada, and New Jersey). Some states (such as Georgia) charge a hazardous materials discharge fee for facilities that file a Form R, so it's a good practice to check your state requirements. State contacts for the TRI Program are available from the Toxic Chemical Release Inventory Reporting Forms and Instructions. Note that in some cases the state agency contact for TRI reporting is the SERC, and in other cases it's not.

- Some states require annual hazardous waste reporting instead of biennial (every 2 years). For example, Washington requires a “dangerous waste” annual report. Waste managers may report electronically using TurboWaste at: <https://fortress.wa.gov/ecy/turbowaste>
- States including New Hampshire, South Carolina, and Oklahoma require quarterly hazardous waste reporting.
- Some states have mandatory GHG reporting requirements. Various thresholds and triggers apply. Some states require all sources over certain emission thresholds (tpy) to report. Others require all Title V permit holders, all sources otherwise required to report air emissions, certain industrial facilities, or sources subject to New England’s Regional Greenhouse Gas Initiative (RGGI) to report.
- Based on applicability to Title V sources, other air permitting requirements, or emission thresholds, there is a reasonable probability that mandatory state reporting requirements could apply to some DLA facilities in at least Washington, Oregon, California, North Carolina, New Jersey, and Massachusetts. Always check with your state and local air quality regulatory authority.

12.9 For More Information

For Information on...	See...
Agencies	
National Response Center	www.nrc.uscg.mil (800) 424–8802
EPA Office of Air Quality Planning and Standards	https://www3.epa.gov/airquality/
EPA Office of Land and Emergency Management	https://www.epa.gov/aboutepa/about-office-land-and-emergency-management
Listings of SERCs and LEPCs	www2.epa.gov/epcra/state-emergency-response-commissions-contacts
PHMSA Office of Pipeline Safety	www.phmsa.dot.gov
Documents and References	
EPA “Title III List of Lists, Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-to-Know Act (EPCRA) and Section 112r of the Clean Air Act, as Amended”	https://www.epa.gov/epcra/consolidated-list-lists-under-epcracerclaca-ss112r-march-2015-version NOTE: TRI program does not maintain the List of Lists; see EPCRA home page or this direct link.
Tier I and II forms and instructions from EPA	(800) 424–9346 www2.epa.gov/epcra/epcra-sections-311-312
Tier2 Submit Software	www2.epa.gov/epcra/tier2-submit-software

For Information on...	See...
EPCRA Section 313 Industry Guide, Petroleum Terminals and Bulk Storage Facilities, EPA 745-B-00-002. February 2000.	www2.epa.gov/toxics-release-inventory-tri-program/guidance-petroleum-terminals-and-bulk-storage-facilities
Automated Form R (TRI-MEweb) Software and TRI guidance documents	(800) 424-9346 www2.epa.gov/toxics-release-inventory-tri-program/tri-meweb-resources
List of state programs and contacts	www2.epa.gov/home/health-and-environmental-agencies-us-states-and-territories
List of State Tier II submittal procedures.	https://www.epa.gov/epcra/state-tier-ii-reporting-requirements-and-procedures
EPCRA Section 313 Questions and Answers Addendum for Federal Facilities – Revised 1999 Version (May 2000)	https://ofmpub.epa.gov/apex/guideme_ext/guideme_ext/guideme/file/1999qa-addendum-federal-facilities.pdf
Hazardous waste reporting	
NetDMR (NPDES discharge monitoring reports)	www.epa.gov/netdmr/
eNOI (EPA's stormwater MSGP and CGP submittals)	https://www.epa.gov/npdes/electronic-notice-intent-enoi
Risk Management Plans under the Chemical Accident Prevention Provisions and RMP*eSubmit	https://www.epa.gov/rmp
EPA's Greenhouse Gas Reporting Program and Electronic Greenhouse Gas Reporting Tool (e-GGRT)	www.epa.gov/ghgreporting/index.html
PHMSA Portal for pipeline reporting	https://www.phmsa.dot.gov/forms/pipeline-forms

12.10 Action Items



Action Items

Item	Date Started	Date Completed	N/A	Comment(s)
<i>Submit</i> new or revised SDSs or lists of SDSs to the LEPC, SERC, and community fire department within three months of acquiring a new hazardous chemical above the thresholds.			<input type="checkbox"/>	
<i>Submit</i> your Tier II report to the LEPC, SERC, and community fire department by March 1 every year.			<input type="checkbox"/>	
<i>Contact</i> your state hazardous waste agency to determine if you are required to submit a biennial or annual hazardous waste report by the March 1 deadline.			<input type="checkbox"/>	
<i>Prepare</i> TRI or Form R reports for each toxic chemical you manufacture, process, or otherwise use above the thresholds and submit it to EPA and your SERC by July 1.			<input type="checkbox"/>	
<i>Review</i> your wastewater and stormwater permits to determine whether sampling and analysis is required, and when the results should be submitted to the state agency.			<input type="checkbox"/>	
<i>Notify</i> the air quality agency when you construct or modify petroleum or volatile liquid storage tanks subject to the air emissions requirements in the NSPS (40 CFR 60 Subparts A, K, Ka, and Kb).			<input type="checkbox"/>	
<i>Comply</i> with the specific reporting requirements in your air permit.			<input type="checkbox"/>	
<i>Prepare</i> your annual air emissions inventory report and submit it to your air agency by the date required (varies between states). You may also need to pay a fee with your emissions report. The fee is usually based on the quantity of pollutants emitted from your facility.			<input type="checkbox"/>	

Item	Date Started	Date Completed	N/A	Comment(s)
<i>Comply</i> with the applicable monitoring and reporting requirements in 40 CFR 60 Subpart XX and 40 CFR 63 Subpart R and Subpart EEEE if your facility is a bulk terminal subject to these rules			<input type="checkbox"/>	
<i>Maintain</i> copies of all reports, records, and supporting calculations for the time periods noted in each specific regulation.			<input type="checkbox"/>	



CHAPTER 12 Appendices

Appendix 12–1 Exclusions and Exemptions from EPCRA

Appendix 12–2 TRI Reporting Decision Diagram EPCRA Section 313

Appendix 12–3 Estimated Concentration Values of Toxic Chemicals in Crude Oil and Petroleum Products

Appendix 12–4 Estimated Quantities Required to Exceed the Processing Threshold for Several Petroleum Products

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Appendix 12-1: Exclusions and Exemptions from EPCRA

This appendix presents exemptions or exclusions from the Emergency Planning and Community Right-to-Know (EPCRA) requirements.

EPCRA Sections 301–303: Emergency Planning

- Mixtures or solutions containing less than 1 percent by weight of extremely hazardous substances (EHSs) (40 CFR 355.13)
- Food, additives, drugs, or cosmetics covered by the Food and Drug Administration (FDA) (40 CFR 355.61)
- Solid manufactured items if normal conditions of use do not present an exposure to the substance (40 CFR 355.61)
- Used for personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution and use by the general public (40 CFR 355.61)
- Used in a research laboratory, hospital, or other medical facility under the supervision of a technically qualified individual¹ (40 CFR 355.61)
- Used in routine agricultural operations or is a fertilizer held for sale by a retailer for customer use (40 CFR 355.61)

EPCRA 304: Emergency Release Notifications

- Releases of EHS or hazardous substances resulting in exposure to persons solely within the facility boundary (40 CFR 355.31(a))
- Releases of hazardous substances or EHSs in amounts below the RQ (or if there is no RQ, below 1 lb) (40 CFR 355.30)
- Federally permitted releases (40 CFR 355.31(b))
- Continuous releases stable in quantity and rate as defined in 40 CFR 302.8(b) need only provide initial notification (40 CFR 355.32)
- Pesticide products used in a proper manner (40 CFR 355.31(c))
- Releases of material during transportation or storage related to transportation under active shipping papers (EPCRA Statute Section 327)

EPCRA Sections 311 and 312: SDS and Tier Reporting

- Chemical or substances not required to have a Safety Data Sheet under OSHA 29 CFR 1910.1200 (40 CFR 370.13)
- Contained in mixtures at concentrations less than 1 percent by weight of hazardous chemicals or less than 0.1 percent for carcinogens (40 CFR 370.14(c))
- Food additives, drugs, or cosmetics covered by the FDA (40 CFR 370.13(a))
- Solid manufactured items if normal conditions of use do not present an exposure to the substance (40 CFR 370.13(b))
- Used for personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution and use by the general public (40 CFR 370.13(c)(1))
- Used in a research laboratory, hospital, or other medical facility under the supervision of a technically qualified individual (40 CFR 370.13(c)(2))
- Used in routine agricultural operations or is a fertilizer held for sale by a retailer for customer use (40 CFR 370.13(c)(3))

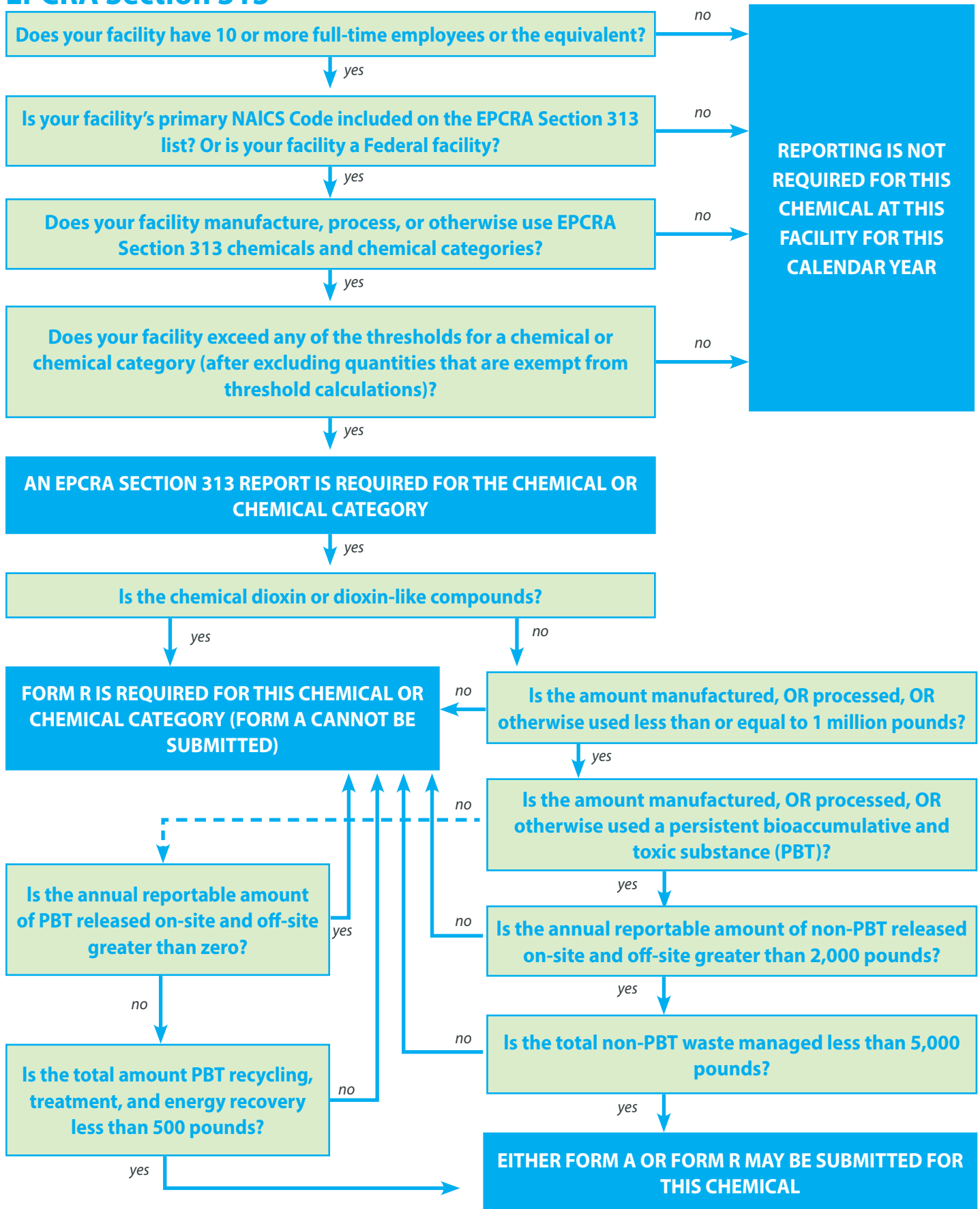
¹ *Technically qualified individual: one who, because of education, training, or experience, can understand health and environmental risks used under his or her supervision*

- Tobacco or tobacco products (29 CFR 1910.1200(b)(6))

EPCRA Section 313: Toxic Release Inventory or Form R Reporting

- Contained in mixtures at concentrations less than 1 percent by weight of hazardous chemicals or less than 0.1 percent for carcinogens (40 CFR 372.38(a))
- Toxic chemicals present in manufactured items or articles (40 CFR 372.38(b))
- Laboratory uses of toxic chemicals under the supervision of a technically qualified individual (40 CFR 372.38(d))
- Toxic chemicals used for structural components, janitorial maintenance, facility grounds maintenance, or personal use (40 CFR 372.38(c)(1)–(3))
- Products containing toxic chemicals used to maintain motor vehicles (40 CFR 372.38(c)(4))
- Toxic chemicals already present in raw water and air supplies used at the facility (40 CFR 372.38(c)(5))
- Owners of real estate that lease the property and have no business interest in the operation of the facility (40 CFR 372.38(e))
- Releases of toxic chemicals from a transportation vehicle that occurs while the vehicle is still under active shipping papers and awaiting shipment to the final destination (EPCRA Section 327)

Appendix 12-2: TRI Reporting Decision Diagram EPCRA Section 313



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Appendix 12-3: Estimated Concentration Values of Toxic Chemicals in Crude Oil and Petroleum Products

EPCRA Section 313 Chemical	De Minimis Level ^a	Crude Oil	Gasoline (Various Grades)	No. 2 Fuel Oil/Diesel Fuel	Jet Fuel (JP-4)	Kerosene	No. 6 Fuel Oil	Aviation Gasoline
Benzene	0.1	0.446 ^R	1.608 ^R	8.0E-04 ^A	1.0 ^A	0.004 ^A	0.001	0.515 ^R
Biphenyl	1.0	0.060 ^R	0.010 ^R	0.100	0.120 ^R	0.120 ^R	--	--
Bromine	1.0	--	--	--	--	--	3.0E-06	--
Chlorine	1.0	--	--	--	--	--	0.0131 ^D	--
Cyclohexane	1.0	0.700	0.240	--	1.240	--	--	--
Ethylbenzene	1.0	0.346 ^R	1.605 ^R	0.013 ^A	0.50 ^A	0.127 ^A	0.0022	0.432 ^R
n-Hexane	1.0	2.463 ^R	1.0 ^T	1.0 ^A	1.5 ^T	0.005 ^A	--	0.126 ^R
MTBE ^b	1.0	--	15.000	--	--	--	--	--
Naphthalene	1.0	0.219 ^R	0.444 ^R	0.550	0.468 ^R	0.733 ^R	0.100	0.100 ^R
Phenanthrene	1.0	--	--	0.125	--	--	--	--
Phenol	1.0	0.323	0.055	0.064	--	0.770	--	--
PACs ^c	0.1	0.0004	--	--	--	--	1.130	--
Styrene	0.1	--	@	0.032 ^R	--	--	--	--
Toluene	1.0	0.878 ^R	7.212 ^R	0.032 ^A	3.20 ^A	0.13 ^T	0.006	7.327
1, 2, 4-Trimethylbenzene	1.0	0.326	2.500 ^g	1.000 ^g	--	--	--	--
Xylene (mixed isomers)	1.0	1.420 ^R	7.170	0.290 ^A	3.20 ^A	0.31 ^A	0.013	2.204
Antimony ^d	0.1	1.0E-05	--	--	--	--	1.0E-06	--
Arsenic ^d	0.1 / 1.0 ^e	2.0E-05	--	8.5E-06	--	--	3.06E-05 ^D	--
Beryllium ^d	0.1 / 1.0 ^e	2.0E-07	--	5.0E-06	--	--	2.7E-06 ^D	--
Cadmium ^d	0.1/1.0 ^e	4.0E-07	--	2.1E-05	--	--	2.0E-06 ^D	--
Chromium ^d	0.1/1.0 ^f	4.0E-05	--	9.5E-05	--	--	3.1E-05 ^D	--
Cobalt ^d	1.0	0.0003	--	--	--	--	1.63E-04 ^D	--
Copper ^d	1.0	4.0E-05	--	5.6E-04	--	--	3.0E-05	--
Lead Compounds	1.0 (organic) 0.1 (inorganic)	--	--	--	--	--	1.41E-04 ^D	0.14 ^h (organic)
Manganese ^d	1.0	--	--	2.1E-05	--	--	3.5E-05 ^D	--
Mercury ^d	1.0	0.0006	--	4.0E-05	--	--	9.2E-07 ^D	--
Nickel ^d	0.1	0.0055	--	3.38E-04	--	--	2.6E-03 ^D	--
Selenium ^d	1.0	4.0E-05	--	--	--	--	9.5E-06 ^D	--
Silver ^d	1.0	--	--	--	--	--	2.0E-08	--
Zinc Compounds	1.0	--	--	--	--	--	--	--

Unless otherwise noted, source: *Economic Analysis of the Final Rule to Add Certain Industry Groups to EPCRA Section 313*, Appendix B "Composition of Crude Oil and Petroleum Products."

^AAmerican Petroleum Institute report prepared for Mr. Jim Durham, EPA (December 23, 1993), regarding revised estimates of heavy petroleum product liquid constituents that are listed as hazardous air pollutants (HAPs) under section 112 of the Clean Air Act Amendments (CAAA).

^RRadian Corporation report prepared for Mr. Jim Durham, EPA (August 10, 1993), regarding liquid HAP concentrations of various petroleum products.

^DAppendix D, Study of Hazardous Air Pollution Emissions from Electric Utility Steam Generating Units--Final Report to Congress, USEPA, OAQPS (February 1998) 453/R-98-004b.

^TThese values have been revised to be consistent with the current version of EPA's emission estimation program TANKS 4.0.

- Concentration data not available based on data sources reviewed

^aThe *de minimis* concentration values for the metals is for the metal compound.

^bMTBE may be present to enhance octane in concentrations from 0-15%.

^cThe petroleum products may contain one or more of the following chemicals under the polycyclic aromatic compounds (PACs) category:

benzo(a)anthracene, benzo(b)fluoranthene, benzo(j)fluoranthene, benzo(k)fluoranthene, benzo(rst)pentaphene, benzo(a)phenanthrene, benzo(a)pyrene, dibenz(a,h)acridine, dibenz(a,j)acridine, dibenzo(a,h)anthracene, 7H-dibenzo(c,g)carbazole, dibenzo(a,e)fluoranthene, dibenzo(a,e)pyrene, dibenzo(a,h)pyrene, dibenzo(a,l)pyrene, 7,12-dimethylbenz(a)anthracene, ideno(1,2,3-cd)pyrene, 5-methylchrysene, 1-nitropyrene. For No. 6 fuel oil, the value given is for benzo(a)anthracene.

^dConstituents are most likely metal compounds rather than the elements. Elements are listed in this table because concentration data are for only the metals occurring in the fuel. Concentrations for metal compounds would be somewhat higher depending on the metal compound. For threshold determination, if the weight of the compound is not known, facilities may use the weight of the lowest metal compound likely to be present.

^eThe *de minimis* level for inorganic compounds is 0.1; for organic compounds is 1.0.

^fThe *de minimis* level for chromium VI compounds is 0.1; for chromium III compounds is 1.0.

^gConcentrations updated with comments received from API.

^hLead compounds and n-Hexane concentration for Aviation Gasoline 100 (Exxon-MSDS).

@Data from EPA report prepared by Radan Co. for this constituent are considered suspect and are not recommended for use, based on discussion with Mr. Jim Durham of EPA on November 30, 1998.

Appendix 12-4: Estimated Quantities Required to Exceed the Processing Threshold for Several Petroleum Products

Product	EPCRA Section 313 Chemicals that May Be Present Above <i>De Minimis</i>	Concentration (weight percent)	Quantity of Product Required to Meet the 25,000 lb Threshold for Processing (Gallons)
Gasoline (various grades)	Benzene	1.608	258,389
	Ethylbenzene	1.605	258,872
	MTBE	15.000	27,699
	n-Hexane	1.0	415,282
	Toluene	7.212	57,611
	1,2, 4-Trimethylbenzene	2.500	166,196
	Xylene (mixed isomers)	7.170	57,948
No. 6 Fuel Oil	Benz(a)anthracene (PACs)	1.130	276,549
Crude Oil	Benzene	0.446	794,526
	n-Hexane	2.463	143,873
	Xylene (mixed isomers)	1.420	249,548
No. 2 Fuel Oil/Diesel Fuel	1,2,4-Trimethylbenzene	1.000	357,143
Lubricating Oil	Zinc Compounds	1.000	351,865
Aviation Gas	Benzene	0.515	831,940
	Toluene	7.327	58,475
	Xylene (mixed isomers)	2.204	194,396
Jet Fuel (JP-4)	Benzene	1.0	380,359
	Cyclohexane	1.240	323,305
	n-Hexane	1.5	266,667
	Toluene	3.2	125,281
	Xylene (mixed isomers)	3.2	125,281

Source: *Economic Analysis of the Final Rule to Add Certain Industry Groups to EPCRA Section 313, Appendices Band H, "Memorandum from Patrick B. Murphy, Radian/RTP to James F. Durham, EPA/CPB Concerning Petroleum Refinery Liquid HAP and Properties Data, August 10, 1993," and "Memorandum from Paul C. Bailey, Jr., API/Washington, DC to James F. Durham, EPA/CPB Concerning Revised Estimates of Heavy Petroleum Product Liquid Constituents, December 23, 1993"*

Updated information from comments received on guidance document for 1,2,4-Trimethylbenzene in gasoline and No. 2 fuel oil/diesel fuel. Subsequently revised (February 2000) to be consistent with EPA's emission estimating program tanks, for n-Hexane in gasoline and jet fuel.

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