
REPORTING ENVIRONMENTAL RELEASES IN COLORADO



**Colorado Department
of Public Health
and Environment**

**Hazardous Materials and Waste Management Division
(303) 692-3300**

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Purpose of this Guidance

This guidance is intended to provide an overview of various reporting requirements for a variety of releases to the environment. Please check all of the possible requirements for reporting. This guidance does not cover all potential release scenarios. This guidance is not intended to modify or replace statutes or regulations, which undergo periodic revisions. In the event of a conflict between this guidance and statutes or regulations, the statutes and regulations govern.

Some reporting requirements are complex and overlapping, and this guidance does not go into details of all situations. If a release situation is not described in this guidance, or if clarification is desired, please obtain an official interpretation from the governing agency enforcing the statute or regulation.

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Contact Information

Release Reporting Numbers

National Response Center (NRC) 24-hour reporting	1 (800) 424-8802
Colorado Environmental Release and Incident Reporting Line 24-hour reporting	1 (877) 518-5608
Radiation Incident Reporting Line 24-hour reporting	(303) 877-9757
Colorado State Patrol 24-hour reporting	(303) 239-4501
US EPA Region 8 Emergency Response Spill Report Line 24-hour reporting	(303) 293-1788
Division of Oil and Public Safety (Dept. of Labor and Employment) Fax	(303) 318-8547 (303) 318-8546
Oil and Gas Conservation Commission (Dept. of Natural Resources)	(303) 894-2100
Division of Reclamation, Mining and Safety (Dept. of Natural Resources)	(303) 866-3567
Colorado Public Utilities Commission Gas Pipeline Safety Section (Dept. of Regulatory Agencies)	(303) 894-2851
Local Emergency Planning Committee (Dept. of Local Affairs) Business hours only - to obtain a list of LEPC contacts	(720) 852-6603

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Environmental Divisions

Air Pollution Control Division Website Email	(303) 692-3100 www.colorado.gov/cdphe/apcd comments.apcd@state.co.us
Consumer Protection Division Website Email	(303) 692-3620 www.colorado.gov/cdphe/dehs comments.cpd@state.co.us
Hazardous Materials and Waste Management Division Website Email	(303) 692-3300 www.colorado.gov/cdphe/hm comments.hmwmmd@state.co.us
Water Quality Control Division Website Email	(303) 692-3500 www.colorado.gov/cdphe/wqcd comments.wqcd@state.co.us

Colorado Environmental Release Reporting

When a release of a hazardous material or other substance occurs to the environment, there are a number of reporting and notification requirements that must be followed by the company or individual responsible for the release. Environmental releases must be reported to the appropriate authorities so that necessary response actions are taken in a timely fashion to ensure maximum protection of human health and the environment.

However, taking appropriate and timely response actions do not relieve you of your responsibility to report a release. In addition, the responsible party is always liable for any damages that may result from a release, and is responsible for appropriate clean up actions whether or not the release is required to be reported.

Additional reporting requirements may be found in permits, licenses, registrations, contingency and pollution prevention plans, fire codes, and local ordinances.

There is no penalty for over-reporting, but there are for failing to report a release. If you are unsure if a release needs to be reported, the Colorado Department of Public Health and Environment (the Department) recommends that releases be reported immediately even if the quantity of the release has not yet been determined. Your follow-up report will provide details that explain why the release was or was not reportable.

“Release” includes any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, including abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance, pollutant, or contaminant.

"Environment" is generally defined as any surface water, ground water, drinking water supply, land surface, subsurface strata, or ambient air. Releases into containment devices and those completely contained within a building or other structure are not releases into the environment as long as the hazardous substance does not volatilize into the ambient air or otherwise have the potential to enter the environment (e.g., through the floor or cracks in the floor). Releases of a substance into a storm drain or sewer, or onto a parking lot or roadway, are considered to be releases to the environment.

Most spills and releases are covered by more than one reporting requirement, and all requirements must be met.

Release reporting requirements are based on the type of material released and/or the situation under which the release occurred. Additional reporting requirements may be found in permits, licenses, registrations, contingency and pollution prevention plans, fire codes, and local ordinances. Please check all of the possible requirements for reporting. Most spills and releases are covered by more than one reporting requirement, and ALL requirements must be met. Enforcement action may be taken against those who fail to provide required notifications or reports.

A. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)

The Comprehensive Environmental Response, Compensation and Liability Act, commonly known as Superfund or CERCLA, provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. This Act also enabled revision of the National Contingency Plan, which provides the guidelines and

procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants.

Under CERCLA, the US EPA was directed to establish reporting quantities for all hazardous substances. The term "hazardous substance" is defined in CERCLA Section 101(14). These are defined by reference to substances that are listed or designated under other environmental statutes. They include:

- all hazardous air pollutants (HAPs) listed under Section 112(b) of the Clean Air Act (CAA). Radio-nuclides are hazardous substances because EPA designated them generically as hazardous air pollutants under Section 112(b) of the Clean Air Act. Even though the source of their listing is the Clean Air Act, releases of radionuclides to all media, not just to air, are covered by CERCLA's reporting requirements.
- toxic pollutants that are subject to pretreatment standards under Section 307(a) of the Clean Water Act (CWA) and toxic pollutants that present an imminent danger to public health when discharged to waters of the United States as designated under Section 311(b)(2)(A) of the Clean Water Act. All Clean Water Act hazardous substances are CERCLA hazardous substances, but only some CERCLA hazardous substances are Clean Water Act hazardous substances.
- wastes that are regulated as listed and/or characteristic hazardous wastes under the Resource Conservation and Recovery Act (RCRA). This includes thousands of hazardous wastes that are not specifically listed but that exhibit one or more of the characteristics of ignitability, reactivity, corrosivity or toxicity. A material is considered to be a release of a CERCLA hazardous substance if the material was a waste prior to release, or if the substance is not cleaned up for reuse and thus must be disposed of as a RCRA hazardous waste after release.
- any element, compound, mixture solution or substance designated under Section 102 of CERCLA that may present substantial danger to public health or welfare or the environment.
- any imminently hazardous chemical substance or mixture that EPA has taken action against under Section 7 of the Toxic Substances Control Act (TSCA). Any hazardous chemical substance or mixture that EPA has taken action against under this Act would automatically become a hazardous substance. To date, EPA hasn't designated any hazardous substances under the Toxic Substances Control Act.

Report releases at or above the reportable quantity (RQ) within 24 hours:

- Hazardous air pollutants under Section 112(b) of Clean Air Act
- Toxic pollutants under Section 307(a) or under Section 311(b)(2)(A) of Clean Water Act
- RCRA hazardous wastes
- Elements, compounds or substances under Section 102 of CERCLA

The person in charge of a facility or vessel must immediately report a release to the National Response Center (NRC) as soon as they have knowledge of a release to the environment of a CERCLA hazardous substance at or above the reportable quantity assigned to that substance within a 24-hour period. If the release is a mixture or solution of hazardous substances, it must be reported if the reportable quantity for any hazardous constituents is met or exceeded. If the responsible party doesn't know the quantity of one or more of the hazardous constituents contained in a mixture or solution, they must report the release if the total amount of the mixture or solution released equals or exceeds the reportable quantity for the hazardous constituent with the lowest reportable quantity.

Reporting is also required if a non-CERCLA substance is released into the environment and rapidly degrades into a CERCLA hazardous substance in an amount that equals or exceeds the reportable quantity for the newly formed CERCLA hazardous substance.

These notification and reporting requirements are included in 40 CFR Part 302. A list of CERCLA hazardous substances is included in Table 302.4 of these regulations.

B. Emergency Planning and Community Right-to-Know Act (EPCRA)

The Superfund Amendments and Reauthorization Act of 1986 reauthorized the Comprehensive Response, Compensation and Liability Act to continue cleanup activities around the country. Several amendments, definitions, clarifications and technical requirements were added to the legislation, including additional enforcement authorities. Title III of the Superfund Amendments also authorized the Emergency Planning and Community Right-to-Know Act (EPCRA), which established the community's right to information about the chemicals that are stored, used at and/or released from local facilities. It also established a framework for developing emergency plans for responding to releases and reporting requirements for facilities.

A list of EPCRA threshold planning quantities (TPQ) is included in 40 CFR Part 355 Appendices A & B.

Under this Act, owners or operators of facilities at which a hazardous substance or extremely hazardous substance is produced, used or stored must provide immediate notification to the National Response Center (NRC), the State Emergency Response Commission (SERC) and the affected Local Emergency Planning

Committee (LEPC) when there is a release of a hazardous substance or extremely hazardous substance with the potential to affect off-site persons that equals or exceeds its reportable quantity within a 24-hour period. If the release is an EPCRA extremely hazardous substance, but not a CERCLA hazardous substance, then only the SERC and LEPC need to be notified. Note – there may be more than one SERC and/or LEPC potentially affected by a release. Don't wait until there is a release to contact the SERC and LEPC(s) to ensure that the correct contacts will be made in the event of a spill. For a list of LEPCs, contact the Colorado Department of Local Affairs.

The owner or operator of the facility must report a release as soon as they know about it. In addition to immediate telephone notification, the responsible party must also send a follow-up written report as soon as practicable after the release to both the State Emergency Response Commission (in this case, to the Colorado Department of Public Health and Environment) and the Local Emergency Planning Committee. This report must describe the release, associated response actions taken, and any known or anticipated health risks associated with the release.

Although EPCRA requires notification only for releases that have the potential to affect persons beyond the facility boundary, EPA and the Colorado

A table of CERCLA reportable quantities (RQ) is included in 40 CFR Section 302.4.

Department of Public Health and Environment strongly encourage facilities to report onsite releases if there is ANY potential for the release to migrate offsite. The burden of proof is on the facility to show that any release into the environment of a reportable quantity or more of a hazardous substance or extremely hazardous substance has NO POTENTIAL for offsite migration (e.g., via groundwater, the wind or getting tracked offsite by workers and vehicles).

The State Emergency Response Commission (SERC) in Colorado is called the Colorado Emergency Planning Commission (CEPC). It consists of representatives of the Colorado Department of Public Health and Environment – Hazardous Materials and Waste Management Division, the Colorado Department of Local Affairs – Colorado Division of Emergency Management and the Division of Local Government, the Colorado Department of Public Safety –

Fire Safety Division, and the Colorado State Patrol. The Commission also includes representatives of affected industries, local governments, public interest or community groups and the Local Emergency Planning Committee (LEPC) community. The Colorado Department of Public Health and Environment represents the Commission for reporting purposes.

Reportable Quantities Under CERCLA and EPCRA

All reportable quantities are listed in pounds (except radionuclides, which are in curies). Congress established a one pound reportable quantity for all hazardous substances and extremely hazardous substances until EPA could evaluate each substance and adjust the reportable quantity to a level more appropriate for the substance. During this assessment, each hazardous substance was evaluated for six primary criteria: aquatic toxicity, mammalian toxicity, ignitability, reactivity, chronic toxicity, and potential carcinogenicity. Reportable quantities for CERCLA hazardous substances are listed in 40 CFR Section 302.4.

EPCRA extremely hazardous substances that are also hazardous substances under CERCLA have the same reportable quantity that is applicable under CERCLA. If not also listed as a CERCLA hazardous substance, extremely hazardous substances have a reportable quantity equal to the EPCRA threshold planning quantity (TPQ) for that substance. The threshold planning quantity is the quantity designated for each chemical in 40 CFR Part 355 Appendices A and B that triggers notification by facilities to the State Emergency Response Commission that those facilities are subject to emergency planning requirements.

For convenience, reportable quantities for hazardous substances and extremely hazardous substances can also be found in the EPA List of Lists (EPA 550-B-01-003). Bear in mind that because this document is only updated periodically, it may not contain recently added substances.

All concurrent releases of the same substance from a single facility must be combined to determine if a reportable quantity has been met or exceeded. Releases of different substances from a single facility should not be combined for purposes of determining if the releases need to be reported. Rather, each substance should be evaluated separately to determine if one or more reportable quantities have been met or exceeded. For example, spilling a mixture containing half the

EPCRA extremely hazardous substances that are also CERCLA hazardous substances have the same RQ as under CERCLA.

EPCRA extremely hazardous substances that are not listed under CERCLA have an RQ equal to their TPQ under EPCRA.

reportable quantity of one hazardous substance and half the reportable quantity of another hazardous substance does not trigger the reporting requirement. Releases from separate facilities should be treated as separate releases and should not be combined to determine if a reportable quantity has been met or exceeded.

Mixtures

Most hazardous substances and extremely hazardous substances are not used or stored in pure form, but are mixtures or solutions. If a mixture of hazardous substances or extremely hazardous substances is released and the concentration of all hazardous substances and extremely hazardous substances in the mixture is known, then you must calculate the amount of each hazardous substance and extremely hazardous substance that has been released. If there is more than one hazardous substance or extremely hazardous substance in a mixture, you must check the reportable quantity for each substance. The release must be reported if the reportable quantity for any

hazardous substance or extremely hazardous substance has been met or exceeded. If the concentrations of the hazardous substances or extremely hazardous substances in the mixture are not known, then the release must be reported when the total amount of the mixture released equals or exceeds the reportable quantity for the constituent with the lowest reportable quantity.

Radionuclides

Releases of radionuclides in a mixture are additive. These releases are subject to reporting:

- if each radionuclide in a released mixture or solution is known, then the ratio between the quantity released and the reportable quantity for the radionuclide must be determined for each radionuclide. If the sum of the ratios for the radionuclides in the mixture or solution released is equal to or greater than one, it must be reported.
- if all of the radionuclides in the mixture are known but the quantity released of one or more of the radionuclides is unknown, it must be reported if the total quantity released is equal to or greater than the lowest reportable quantity of any one radionuclide in the mixture.
- if one or more radionuclides in the mixture is unknown, it must be reported if the total quantity released is equal to or greater than either one curie or the lowest reportable quantity of any of the known radionuclides in the mixture (whichever is lower).

Exceptions and Exclusions

Petroleum Products

Under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), petroleum products are excluded from the definition of hazardous substance. "Petroleum product" includes crude oil, any fraction of crude oil that is not specifically listed as a hazardous substance, natural and synthetic gases, and mixtures of natural and synthetic gases. EPA interprets petroleum as including those amounts of hazardous substances, like benzene, that are indigenous to crude oil or its fractions or that are normally added during the refining process.

Hazardous substances added to the petroleum or increased in concentration solely as a result of contamination during use are not included in the petroleum exclusion.

A release of a petroleum product containing a reportable quantity of an EPCRA extremely hazardous substance is reportable.

Unlike the petroleum exclusion under CERCLA, extremely hazardous substances that are naturally occurring in petroleum products or that are normally added during refining are subject to reporting under the Emergency Planning and Community Right-to-Know Act (EPCRA). Therefore, a release of a petroleum product containing a reportable quantity of one or more extremely hazardous substances is reportable to the Colorado Emergency Planning Commission (CERC) and the Local Emergency Planning Committee (LEPC) if a reportable quantity is met or exceeded.

The responsible party is always responsible for appropriate clean up actions whether or not the release is required to be reported.

Note: releases of oil and petroleum to water are also covered under the Clean Water Act (Section E of this document). Releases of petroleum from regulated storage tanks are covered under the Colorado storage tank regulations (Section H of this document).

Metals

Under normal handling and use, solid forms of most metals present few health hazards. Metal fines and metal dust may cause irritation of the eyes, skin, and respiratory system, and fine particles of certain metals, including antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, or zinc, dispersed in the air can be an explosion and/or health hazard. EPA has determined that releases of these metals with particles larger than 100 micrometers would not normally require response action due to the unlikely inhalation of such large particles. However, notification of the release of a reportable quantity of antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, or zinc is required if the mean diameter of the particles released is less than 100 micrometers (0.004 inches). An exception to this is a release of a metal classified as a radionuclide, which does not qualify for this exemption even if the particles meet the size criteria.

Naturally Occurring Radionuclides

Notification of the release of naturally occurring radionuclides from large land holdings, like parks or golf courses, is not required. EPA broadened this exemption to include land containing ore reserves even if the undisturbed ores contain elevated natural concentrations of radionuclides, and to land disturbance activities including farming, construction, and disturbance incidental to extraction activities at all mines except uranium, phosphate, tin, zircon, hafnium, vanadium, monazite, and rare earth mines. Land disturbance incidental to extraction activities includes land clearing, overburden removal and stockpiling, and excavating, handling, transporting and storing ores and other raw materials. Land disturbance incidental to extraction also includes replacing materials in mined-out areas as long as those materials have not been processed and don't contain elevated radionuclide concentrations. Notification of the release of naturally occurring radionuclides from sites where coal and coal ash (fly ash, bottom ash, boiler slag) are stored or disposed is also not required.

Federally Permitted Releases

Releases that are regulated under one or more of the following programs are exempt from CERCLA and EPCRA reporting requirements:

- permitted discharges under the National Pollutant Discharge Elimination System (NPDES);
- permitted dredge and fill discharges under Section 404 of the Clean Water Act;
- permitted and interim status hazardous waste units under the Resource Conservation and Recovery Act;
- permitted discharges under the Marine Protection, Research and Sanctuaries Act;
- permitted injection of fluids under the Underground Injection Control (UIC) program in accordance with the Safe Drinking Water Act;
- air emissions subject to permit or control regulations under the Clean Air Act;
- permitted or allowed injection of fluids to develop crude oil or natural gas supplies;
- discharges of contaminants to Publicly Owned Treatment Works (POTW) if in compliance with pretreatment requirements under the Clean Water Act;
- releases of certain nuclear materials if in compliance with a license, permit, regulation or order issued in accordance with the Atomic Energy Act.

Registered Pesticides

The normal application of a pesticide product registered under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) is exempt from CERCLA and EPCRA reporting. This exemption includes the handling and storage of the product by an agricultural producer, but does not include

any spills of the pesticide. Pesticide spills are reportable if the amount spilled meets or exceeds the reportable quantity.

Continuous Releases

A continuous release is a release that occurs without interruption or abatement or that is routine, anticipated, intermittent, and incidental to normal operations or treatment processes. When a release of this type occurs, officials do not have to be notified each time. Instead, the facility can report it as a continuous release to the National Response Center, the Colorado Emergency Planning Commission and the Local Emergency Planning Committee(s) by telephone. This should be followed by a written report submitted to EPA Region 8, the Colorado Department of Public Health and Environment and the Local Emergency Planning Committee within 30 days of the initial telephone call. The written report should provide information about the source, composition, and normal range of the release. Periodic follow-up reports may also be required. Any release that exceeds the normal range (called a “statistically significant increase”) must be reported immediately to the National Response Center, the Colorado Department of Public Health and Environment and the Local Emergency Planning Committee as if they were new release events. The normal range is determined by the amount of a hazardous substance released over any 24-hour period under normal operating conditions during the preceding year. Only releases that are both continuous and stable in quantity and rate can be included in the normal range.

Continuous release of an extremely hazardous substance that is not a CERCLA hazardous substance need only be reported to the Colorado Department of Public Health and Environment and the Local Emergency Planning Committee. A written report should also be sent to these two agencies within 30 days and any statistically significant increases in the release should be reported to both agencies. Periodic follow-up reports may also be required.

C. Resource Conservation and Recovery Act (RCRA)

All Resource Conservation and Recovery Act (RCRA) listed and characteristic hazardous wastes are designated as hazardous substances under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). For more information on listed and characteristic hazardous wastes, please review the Hazardous Waste Identification Guidance Document from the Hazardous Materials and Waste Management Division.

The reportable quantity for F- and K-listed hazardous wastes is based on the hazardous waste code. If the composition and concentrations of all included constituents is not known, the reportable quantity would be as listed for the waste code in 40 CFR Section 302.4. If the waste is analyzed and the concentrations of ALL of its hazardous constituents are identified, then reportable quantities of the specific constituents can be used to determine when reporting is required. For example, if a release of an F005 listed hazardous waste occurred and the concentrations of the constituents making up the waste were unknown, the reportable quantity would be 100 pounds. If it were known that the F005 waste was comprised of 50% toluene (reportable quantity 1000 pounds) and 50% methyl ethyl ketone (reportable quantity 5000 pounds), then the release would be reported when 2000 pounds of the mixture were released. [Since the reportable quantity for toluene is less than that for methyl ethyl ketone, the amount of toluene released will determine when the release must be reported. Since the mixture is 50% toluene, it would take 2000 pounds of the mixture to meet the reportable quantity of 1000 pounds for toluene.]

P- and U-listed hazardous wastes are reported based on the reportable quantity for the hazardous substance that the waste is listed for. For example, the reportable quantity for hazardous waste code U122 (formaldehyde) is 100 pounds. For the purposes of release reporting, it doesn't matter if the formaldehyde is used or unused or is the "sole active ingredient" in order to be reportable. (Related note: Colorado's hazardous waste regulations (6 CCR 1007-3) do not include the footnote regarding sole active ingredients. In Colorado, chemicals may have more than one active ingredient and still meet the listing description.)

All RCRA listed and characteristic hazardous wastes are designated as hazardous substances under CERCLA.

Unlisted hazardous wastes exhibiting the characteristics of ignitability, corrosivity and/or reactivity have a reportable quantity of 100 pounds unless the concentrations of all the constituents in the waste are known. If the waste is analyzed and the concentrations of ALL its hazardous constituents are identified, the reportable quantities of the specific constituents should be used to determine when reporting is required. For example, a corrosive-only waste of unknown composition has a reportable quantity of 100 pounds. If the waste is analyzed to determine that it was a 50% solution of hydrochloric acid in water, then the reportable quantity of the solution would be 10,000 pounds. [The reportable quantity for hydrochloric acid is 5000 pounds. Therefore it would take 10,000 pounds of the 50% solution to meet the reportable quantity for hydrochloric acid.]

Unlisted hazardous wastes that exhibit toxicity have reportable quantities specific to the constituent on which the characteristic of toxicity is based. The reportable quantity applies to the waste itself, not just to the toxic contaminant. If an unlisted hazardous waste exhibits toxicity on the basis of more than one contaminant, the reportable quantity for the waste is the lowest of the reportable quantities for those contaminants. For example, if a waste exhibits toxicity characteristics for the heavy metals lead (D008) and selenium (D010), with reportable quantities of 10 and 100 pounds respectively, the reportable quantity would be 10 pounds of the waste, or the lower of the two reportable quantities. If a waste exhibits a toxicity characteristic and one or more other hazardous waste characteristics, the reportable quantity for that waste is the lowest of the applicable reportable quantities.

These notification and reporting requirements are included in 40 CFR Part 302.

Permitted and Interim Status Treatment, Storage and Disposal Facilities and Large Quantity Generators of Hazardous Waste

Large quantity generators of hazardous waste and hazardous waste treatment, storage and disposal facilities (TSDF) are required to have and implement a contingency plan that describes the actions facility personnel must take in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface water or groundwater at the facility. Whenever there is an imminent or actual emergency situation, appropriate State and local agencies with designated response roles as described in the contingency plan must be notified immediately. Appropriate local authorities and the National Response Center or government official designated as the regional on-scene coordinator must be notified immediately if the facility's emergency coordinator determines that the facility has had a release, fire, or explosion that could threaten human health or the environment outside the facility. A treatment, storage, and disposal facility's permit generally requires reporting to the Colorado Department of Public Health and Environment – Hazardous Materials and Waste Management Division of any release, fire or explosion, even if the amount of the release is less than an otherwise reportable quantity.

The Department and local authorities must be notified when the facility is back in compliance and ready to resume operations. In addition, the facility must send a written report to both the EPA Regional Administrator and the Colorado Department of Public Health and Environment within 15 days of any incident that requires implementation of the facility contingency plan.

In the case of a release of hazardous waste stored in tanks, the facility must notify the Hazardous Materials and Waste Management Division within 24 hours of a release to the environment of more than one pound. A leak or spill of hazardous waste that is less than or equal to one pound from a tank or tank system does not need to be reported if the release is immediately contained and cleaned up. Within 30 days of the release, a written report must be submitted to the Division.

These notification and reporting requirements are included in 6 CCR 1007-3 Sections 264.56 and 265.56 and Sections 264.196(d) and 265.196(d).

D. Radiation Control

The state of Colorado has specific reporting requirements for stolen, lost or missing licensed or registered sources of radiation. Each licensee or registrant must report to the Colorado Department of Public Health and Environment by telephone in the event of lost, stolen or missing licensed or registered radioactive materials, a lost, stolen, or missing radiation machine, releases of radioactive materials, contamination events, and fires or explosions involving radioactive materials. Incidents should be reported to the Radiation Incident Reporting Line. Based on the severity of the event, notification may be required immediately, within 24 hours or within 30 days. A follow-up written report must also be submitted to the Department within 30 days of initial notification. The licensee must also report any additional substantive information regarding a loss or theft incident within 30 days after learning of such information.

Releases of radionuclides are reportable under CERCLA.

These release and notification requirements are contained in 6 CCR 1007-1 Sections 4.51 - 4.53.

E. Clean Water Act

The Clean Water Act (CWA) requires the person in charge of a facility or vessel to make an immediate report to the National Response Center of discharges of harmful quantities of oil to navigable waters as soon as they have knowledge of the release. In this case, oil means oil of any kind or in any form including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil. Discharges of oil that violate applicable water quality standards and those that cause a film, sheen or discoloration of the surface of the water or adjoining shorelines, or cause a sludge or emulsion to be deposited beneath the surface of the water or on adjoining shorelines must be reported. In effect, this means that any discharge of oil to waters of the United States must be reported to the National Response Center. These release and notification requirements are contained in 40 CFR Part 110.

The Clean Water Act (CWA) also requires the person in charge of a facility or vessel to report to the National Response Center the discharge of a designated hazardous substance from the vessel or facility to waters of the United States in quantities that equal or exceed the reportable quantity as soon as they have knowledge of the release. Under the Act, the US EPA was directed to establish reporting quantities for all hazardous substances listed in Table 116.4 A and B (40 CFR Part 116), which were designated as hazardous substances in accordance with Section 311(b)(2)(A) of the

Clean Water Act. This designation includes any isomers and hydrates as well as any solutions and mixtures containing these substances. Each of these substances is included in the CERCLA list of hazardous substances (40 CFR Part 302 Table 302.4) and is assigned the reportable quantity listed in Table 302.4 for that substance. These release and notification requirements are contained in 40 CFR Parts 116 and 117.

Under the Clean Water Act, anyone that has a National Pollutant Discharge Elimination System (NPDES) permit must report to the National Response Center within 24 hours of becoming aware of any unanticipated bypasses or upsets that cause an exceedance of the effluent limits in their permit and any violation of their maximum daily discharge limits for any pollutant listed in the permit. A written report must be provided within five days. Other instances of noncompliance must be reported when monitoring reports are submitted.

The Clean Water Act also requires all industrial users of Publicly Owned Treatment Works (POTWs) to notify their treatment plant immediately if they have a discharge that could cause problems at the treatment plant.

These notification and reporting requirements are included in 40 CFR Parts 122 and 403.

State Requirements

A spill of any chemical, oil, petroleum product, sewage, etc., which may enter waters of the state of Colorado (which include surface water, ground water, and dry gullies and storm sewers leading to surface water) must be reported immediately to the Colorado Department of Public Health and Environment. Any accidental discharge to the sanitary sewer system must be reported immediately to the local sewer authority and the affected wastewater treatment plant. If a release occurs at a mining operation, the Division of Reclamation, Mining and Safety should also be notified.

For more information regarding State reporting requirements under 25-8-601(2) CRS, please refer to the "Guidance for Reporting Spills under the Colorado Water Quality Control Act and Colorado Discharge Permits" adopted by the Water Quality Control Division. This policy is available on the Water Quality Control Division website.

F. Safe Drinking Water Act

The owner or operator of a public water system (community water systems, non-transient non-community water systems, and transient non-community water systems) must immediately report any credible threat to the water supply system to the Colorado Environmental Release and Incident Reporting Line and to the local emergency manager. The local emergency manager may be the county sheriff or a member of the fire department. A list of local emergency managers is available from the Colorado Department of Local Affairs.

G. Clean Air Act

Hazardous air pollutants (HAPs) listed in Section 112(b) of the Clean Air Act (CAA) are designated as hazardous substances under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Hazardous air pollutants are known or suspected to cause cancer or other serious health effects or adverse environmental effects. Health effects can include immunological, neurological, reproductive, developmental, and respiratory problems. In some cases, hazardous air

pollutants can be deposited onto soils or other surfaces, where they are taken in by plants and animals and can accumulate in organic tissue or pass up the food chain due to the inability of organisms to process the substance.

The release (or air emission) of a hazardous air pollutant that is allowed and less than any limit specified in a facility's air permit is considered to be a federally permitted release. If the facility releases more than is allowed under its air permit within a 24 hour period, the facility must report the release if the quantity released exceeded the facility's permitted level by a reportable quantity or more. For example, if a facility has an air permit that allows the release of 30 pounds of a hazardous substance and that substance has a reportable quantity of 100 pounds, the facility would have to report all releases of 130 pounds or more of that substance. Releases of less than 130 pounds would not need to be reported under CERCLA or EPCRA because even though the facility exceeded its permit limit, the amount released did not exceed the permitted level by its reportable quantity (in this case, 100 pounds) or more. If the air permit does not allow or does not specify the release of a hazardous air pollutant, then releases in excess of the CERCLA / EPCRA reportable quantity for that substance must be reported. Please be aware that other reporting requirements are triggered, however, based on the facility's air permit. The Clean Air Act (CAA) requires that permits for stationary air sources have language requiring prompt reporting of any emergencies, upsets and deviations from what is allowed in the permit. Releases must be reported to the National Response Center and to the Colorado Department of Public Health and Environment. Contact the Air Pollution Control Division for details on additional air-related requirements that may also apply.

Hazardous air pollutants are included in the CERCLA list of hazardous substances in 40 CFR Part 302 and are assigned the reportable quantity listed in Table 302.4 for each substance.

State Requirements

In the case of excess emissions during an emergency or malfunction, the owner or operator must notify the Colorado Department of Public Health and Environment as soon as possible, but no later than noon of the next working day, and provide a written follow-up report to the Air Pollution Control Division by the end of the facility's next reporting period.

These notification and reporting requirements are included in 5 CCR 1001-2 Section II.E and 5 CCR 1001-5, Regulation 3 Part C, Section VII.C.

H. Underground Storage Tanks (USTs) and Aboveground Storage Tanks (ASTs)

<p>The reportable quantity for petroleum from a regulated storage tank system is 25 gallons.</p>

Owners and operators of regulated storage tank systems must report a release or suspected release of regulated substances to the Division of Oil and Public Safety at the Colorado Department of Labor and Employment within 24 hours by telephone or facsimile. If outside normal working hours or on a weekend or holiday and emergency assistance is needed, the release can be reported to the Colorado Environmental Release and Incident Reporting line at the Colorado Department of Public Health and Environment. Any suspected release or release of unknown quantity is a reportable quantity unless the owner/operator can conclusively show the release is less than the reportable quantity for the released substance.

Under this program, the reportable quantity for petroleum releases is 25 gallons or more from regulated aboveground and underground storage tank systems, or any amount that causes a sheen on nearby surface water. This is interpreted to include releases from fuel pumps and fuel delivery trucks while connected to the petroleum storage tank system. Releases of less than 25 gallons from regulated petroleum storage tank systems, or a release of a hazardous substance that is less than the CERCLA reportable quantity, do not need to be reported to the Division of Oil and Public Safety if they are immediately contained and cleaned up. If cleanup cannot be accomplished within 24 hours, the Division of Oil and Public Safety must be notified immediately.

Spills or releases of hazardous substances in excess of the CERCLA reportable quantity from regulated underground storage tanks must also be reported to the National Response Center and the local fire authority immediately. Any release, regardless of quantity, that has or may impact waters of the state (including surface water, groundwater, dry gullies leading to surface water or storm sewers) must also be reported to the Colorado Environmental Release and Incident Reporting line immediately.

These notification and reporting requirements are included in 7 CCR 1101-14 Article 4, 8-20.5-208 CRS and 25-8-601 CRS.

I. Hazardous Materials Transportation

Highway, Aircraft, Rail and Vessel

Federal hazardous materials transportation regulations cover the transportation of hazardous materials by highway, aircraft, rail, and vessel. Transportation includes activities related to transportation like loading, unloading, and temporary storage. "Hazardous material" includes hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials as defined in 49 CFR Section 171.8, materials designated as hazardous in the Hazardous Materials Table in 49 CFR Section 172.101 and materials that meet the criteria for hazardous classes and division in 49 CFR Part 173.

The person in physical possession of the hazardous material during transportation must notify the National Response Center as soon as practical, but not more than 12 hours after an incident, if as a direct result of a hazardous material:

- a person is killed or is injured and requires hospitalization,
- there is an evacuation of the general public that lasts more than an hour,
- a major transportation artery or facility is shut down for an hour or more,
- the operational flight pattern or routine of an aircraft is altered,
- there is fire, breakage, spillage, or suspected contamination involving a radioactive material,
- there is fire, breakage, spillage, or suspected contamination involving an infectious substance other than a regulated medical waste,
- there is a release of a marine pollutant in a quantity exceeding 119 gallons for liquids or 882 pounds for solids,
- or any situation that, in the judgment of the person in possession of the hazardous material, should be reported even though it doesn't meet the above criteria.

Notice of incidents involving an infectious substance may be given to the Director of the Centers for Disease Control and Prevention (1-800-232-0124) instead of notifying the National Response Center.

The person in possession of the hazardous material at the time of the incident must submit a written report within 30 days of the incident to the US Department of Transportation. In addition, a written report must be submitted if there is an unintentional release of a hazardous material or the discharge of any quantity of hazardous waste even though verbal notification may not be required. If the incident involves air transportation, a copy of the report must also be submitted to the Federal Aviation Administration Security Field Office nearest the location of the incident.

These notification and reporting requirements are included in 49 CFR Sections 171.15 and 171.16.

State Requirements

The State also has specific requirements for reporting incidents involving hazardous materials or nuclear materials as cargo during transportation. The driver of a motor vehicle involved in a spill of hazardous material from a fuel tank that provides fuel for the vehicle and/or equipment on that vehicle must immediately notify the nearest law enforcement agency. The driver of a vehicle transporting nuclear or hazardous materials as cargo that is involved in a spill, or an incident which may result in a potential spill, must immediately notify the nearest law enforcement agency. As soon as possible after the initial notification of the spill or incident to the nearest law enforcement agency, the driver or a company representative must notify the Colorado State Patrol and the 24-hour Colorado Environmental Release and Incident Reporting Line. In addition, the driver of a motor vehicle transporting nuclear materials as cargo must immediately notify the Colorado State Patrol if the vehicle is involved in a crash, whether or not there is damage to the vehicle.

If the incident involves the release of hazardous waste, the transporter must notify the Colorado Department of Public Health and Environment and report the ultimate disposition of the waste to the Department in addition to the notifications above. In the event of a spill of hazardous waste at a transfer facility, the transporter must notify the Colorado Department of Public Health and Environment within 24 hours of a spill exceeding 55 gallons or if there is a fire or explosion. A written report must be sent to the Department within 15 days after the incident.

<p>Report releases along a highway to the National Response Center, nearest local law enforcement agency, Colorado State Patrol, and Colorado Environmental Release and Incident Reporting Line.</p>

These notification and reporting requirements are included in 8 CCR 1507-25 Parts I and IV and 6 CCR 1007-3 Part 263.

Pipelines

In Colorado, the US Department of Transportation Office of Pipeline Safety inspects, regulates, and enforces interstate gas pipeline safety requirements. They also inspect, regulate, and enforce both intra- and interstate liquid pipeline safety requirements in this state. Through certification by the Office of Pipeline Safety, the Gas Pipeline Safety Division of the Colorado Public Utilities Commission regulates, inspects, and enforces intrastate gas pipeline safety requirements. Pipeline facilities include transmission, distribution, regulated gathering, master metered, liquefied natural gas, and propane gas systems. Be aware that these regulations are primarily for pipeline safety. Be sure to review other environmental release reporting requirements.

Hazardous Liquids and Carbon Dioxide

Federal hazardous materials transportation regulations cover the transportation of hazardous liquids and carbon dioxide by pipeline. In this case, hazardous liquid is limited to petroleum, petroleum products, and anhydrous ammonia in a non-gaseous state. Petroleum includes crude oil, condensate, natural gasoline, natural gas liquids, and liquefied petroleum gas. Petroleum product includes flammable, toxic or corrosive products obtained from distilling and processing of crude oil, unfinished oils, natural gas liquids, blend stocks, and other miscellaneous hydrocarbon compounds.

As early as practicable following discovery of a release of a hazardous liquid or carbon dioxide from a pipeline system, the operator must notify the National Response Center by telephone if:

- a person is killed or is injured and requires hospitalization,
- there is a fire or explosion not intentionally set by the operator,
- there is estimated property damage (including cost of cleanup and recovery, value of lost product, and damage to property) exceeding \$50,000,
- there is pollution of any stream, river, reservoir, or other body of water that violated applicable water quality standards, caused a discoloration of the surface of the water or adjoining shoreline, or deposited a sludge or emulsion beneath the surface of the water or adjoining shoreline, or
- there is any situation that, in the judgment of the operator, should be reported even though it doesn't meet the above criteria.

A written accident report must be submitted to the US Department of Transportation Office of Pipeline Safety as soon as practicable, but not later than 30 days after discovery of a release. A supplemental report must be submitted within 30 days if the operator receives any updates or additions to the information originally reported.

These notification and reporting requirements are included in 49 CFR Part 195.

Natural Gas and Liquefied Natural Gas

Federal hazardous materials transportation regulations also cover the transportation of natural gas by pipeline and activities occurring at a liquefied natural gas (LNG) facility where natural and synthetic gas are liquefied, transferred or stored.

As early as practicable following discovery of a release of gas from a pipeline or of liquefied natural gas or gas from a liquefied natural gas facility, but generally not to exceed two hours after discovery, the operator must notify the National Response Center and the Colorado Public Utilities Commission Gas Pipeline Safety Section by telephone if:

- a person is killed or is injured and requires hospitalization,
- there is estimated property damage (including value of lost product and damage to property) of \$50,000 or more,
- there is an event that results in an emergency shutdown of a liquefied natural gas facility, or
- there is any situation that, in the judgment of the operator, should be reported even though it doesn't meet the above criteria.

As early as practicable, but not later than 30 days after discovery and verbal report of a release, the operator must submit a written report to the US Department of Transportation Office of Pipeline Safety. A supplemental report must be submitted within 30 days if the operator receives relevant updates or additions to the information originally reported.

These notification and reporting requirements are included in 49 CFR Part 191 and 4 CCR 723-4 Sections 4900 - 4914.

State Requirements

If there is a leak on a gas pipeline, a liquefied natural gas system, a master meter system, or a propane system that results in the evacuation of 50 or more people from a normally occupied building or results in the closure of a roadway, the operator must contact the Colorado Public Utilities Commission Gas Pipeline Safety Section by telephone within two hours of discovery.

This notification requirement is contained in 4 CCR 723-4 Section 4911.

J. Oil and Gas Exploration and Production

Federal oil and gas lease surface operations are managed by the US Department of the Interior Bureau of Land Management (BLM) in cooperation with the appropriate Federal surface management agency or non-Federal surface owner. On National Forest System lands, the Forest Service has approval authority for the surface use portion of Federal oil and gas operations and for appeals related to Forest Service decisions and approvals. The BLM considers the Bureau of Indian Affairs to be the surface management agency for all Indian lands unless a Tribe has contracted the Bureau of Indian Affairs realty function for its lands.

“... All spills or leakages of oil, gas, salt water, toxic liquids or waste materials, blowouts, fires, personal injuries, and fatalities shall be reported by the operator to the BLM and the surface management agency in accordance with the requirements of *Notice to Lessees NTL-3A; Reporting of Undesirable Events*, and in accordance with any applicable local requirements.

The BLM requires immediate reporting of all Class I major events, such as spills of more than 100 barrels of fluid/500 MCF of gas released; fires that consume 100 bbl or more oil or 500 MCF gas; life threatening or fatal injury/loss of well control; release of reportable quantities of hazardous substances; spill, venting, or fire in sensitive areas, such as parks, recreation sites, wildlife refuges, lakes, reservoirs, streams, and urban or suburban areas” ... “Volumes discharged during any of the above incidents will be estimated as necessary. Operators must take immediate action to prevent and control spills and the BLM, the surface management agency, and other applicable regulatory authorities must be consulted prior to treating or disposing of wastes and spills. Operators should become familiar with local surface management agency requirements for reporting and managing spills and leaks. ...” (BLM “The Gold Book,” Fourth Edition, Revised 2007)

State Requirements

Spills and releases of Exploration and Production (E&P) waste and produced fluids should be controlled and contained immediately upon discovery. Impacts resulting from spills and releases should be investigated and cleaned up as soon as practicable.

The rules and regulations for oil and gas exploration and production have recently been revised. Most of these changes become effective May 1, 2009 on federal land and April 1, 2009 on all other land.

If there is a spill or release of more than 20 barrels of E&P waste, it must be verbally reported to the Colorado Oil and Gas Conservation Commission (COGCC) as soon as practicable, but not more than 24 hours after discovery. If there is a spill or release of any size that impacts or

could impact waters of the state, a residence or an occupied structure, livestock or a public byway, it must be verbally reported to the Colorado Oil and Gas Conservation Commission as soon as practicable, but not more than 24 hours after discovery. Spills or releases of any size that impact or threaten to impact any surface water supply area must be reported to the Colorado Oil and Gas Conservation Commission and to the Colorado Environmental Release and Incident Reporting Line. If the release impacts or threatens to impact a surface water intake, it must be verbally reported to the emergency contact for that facility immediately after discovery. The operator must notify the affected surface owner or their appointed tenant of all reportable spills as soon as practicable, but not more than 24 hours after discovery.

Chemical spills and releases must be reported in accordance with all applicable state and federal laws, including the Emergency Planning and community Right-to-Know Act (EPCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Oil Pollution Act, and the Clean Water Act.

Releases of more than 5 barrels of E&P waste, and all other reportable releases, must also be reported on COGCC Form 19 and submitted to the Colorado Oil and Gas Conservation Commission within 10 days after discovery of the release.

These notification requirements are contained in the Colorado Oil and Gas Conservation Commission 900-Series Rules.

K. Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) are managed under the Toxic Substances Control Act. Substances with concentrations greater than or equal to 50 parts per million PCBs are regulated under 40 CFR Part 761, which is implemented by the US Environmental Protection Agency. If a spill of the substance directly contaminates surface water, sewers, drinking water supplies, grazing lands, or vegetable gardens and/or the spill exceeds 10 pounds of PCBs by weight, the responsible party must notify the EPA within 24 hours. In Colorado, contact the Region 8 Emergency Response Spill Report Line. If the spill involves 10 pounds or less of PCBs and does not involve any of these resources, the spill must still be cleaned up, but notification to EPA isn't required. Unless commingled with a hazardous waste, releases of substances containing less than 50 parts per million PCBs are regulated under Colorado's solid waste regulations 6 CCR 1007-2. The solid waste regulations do not have specific release reporting requirements at this time.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) has set the reportable quantity for PCBs at one (1) pound. Any release of oil or other substance containing greater than or equal to one pound of PCBs must be reported to the National Response Center as soon as the release is discovered. In addition, if the release impacts waters of the state of Colorado, the release must be reported as per the Water Quality Control Division's reporting policy (see "Guidance for Reporting Spills under the Colorado Water Quality Control Act and Colorado Discharge Permits", available on the Water Quality Control Division website).

Abbreviations & Definitions

CAA – Clean Air Act

CCR – Code of Colorado Regulations

CDPHE – Colorado Department of Public Health and Environment

CEPC – Colorado Emergency Planning Commission

CERCLA – Comprehensive Environmental Response, Compensation and Liability Act

CFR – Code of Federal Regulations

CRS – Colorado Revised Statutes

CWA – Clean Water Act

EPA – United States Environmental Protection Agency

EPCRA – Emergency Planning and Community Right-to-Know Act

LEPC – Local Emergency Planning Committee

NRC – National Response Center

RCRA – Resource Conservation and Recovery Act

SERC – State Emergency Response Commission

SDWA – Safe Drinking Water Act

EPA's List of Lists is a compendium of the lists of chemicals subject to reporting requirements under the Emergency Planning and Community Right-to-Know Act (EPCRA), the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and chemicals listed under section 112(r) of the Clean Air Act (CAA). Lists are also provided of Resource Conservation and Recovery Act (RCRA) hazardous wastes and radionuclides reportable under the Comprehensive Environmental Response, Compensation and Liability Act. These lists should be used as reference tools, not as a definitive source of compliance information. Reporting requirements for the Emergency Planning and Community Right-to-Know Act and the Comprehensive Environmental Response, Compensation and Liability Act are published in the Code of Federal Regulations (CFR), 40 CFR Parts 302 and 355 respectively. Compliance information for the Clean Air Act section 112(r) is published in 40 CFR Part 68. The List of Lists is available on the Internet at <http://yosemite.epa.gov/oswer/lol.nsf/homepage>.

Exploration and production (E&P) wastes are associated with operations to locate or remove oil or gas from the ground or to remove the impurities from oil or gas.

Extremely Hazardous Substances (EHS) are chemicals that present the most serious hazards during release (in terms of toxicity, reactivity, volatility, combustibility, and flammability) and are regulated under the Emergency Planning and Community Right-To-Know Act (EPCRA). The extremely hazardous substances list consists of approximately 360 substances and is included in EPA's List of Lists.

Facility means any building, equipment, structure, installation, containment structure, pipe, other stationary feature, motor vehicle, rolling stock, or aircraft. Facility also includes any site where a hazardous substance is or has been located.

Hazardous Materials are chemicals posing a hazard to human health or the environment when transported (49 USC 5103). They include hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, all materials in the Hazardous Materials Table (49 CFR 172.101), and materials meeting the criteria for hazard classes in part 173 of subchapter C of 49 CFR 172.101.

Hazardous Substances are chemicals posing a hazard to human health or the environment and are regulated under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The hazardous substance list is included in EPA's List of Lists.

Reportable Quantity (RQ) is a term that applies to the amount of hazardous substances or extremely hazardous substances released within a 24-hour period. *Note that the 24-hour period is the time frame for measuring the quantity released, not the time frame for reporting a release.*

Threshold Planning Quantity (TPQ) is a term that applies to the amount of an extremely hazardous substance that must be present onsite in concentrations greater than 1% by weight of a compound or mixture at which the facility must meet all emergency planning requirements. If not also listed as a CERCLA hazardous substance, extremely hazardous substances have a reportable quantity equal to the threshold planning quantity for that substance.

“Waters of the State of Colorado” are any and all surface waters and subsurface waters (groundwater) that are contained in or flow in or through the state of Colorado. This includes lakes, rivers, streams, creeks, wetlands, irrigation ditches, storm drains, livestock ponds, borrow ditches, and dry gullies. This does not include waters in sewage systems, waters in treatment works of disposal systems, waters in potable water distribution systems, or water withdrawn for use until use and treatment have been completed.