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Note to EPA: This is the text we plan to use for an appendix describing how CERCLA authorities are relevant to activities at well sites. We based this off our review of laws, regulations, guidance documents, and conversations with EPA officials in headquarters and regions 3,5,6, and 8. **Some statements in this appendix are shaded in grey – please review these statements in particular** and confirm and/or provide any additional information or clarification as you see fit.

Appendix #: EPA Regulation of and Authorities Relevant to Oil and Gas Production from Unconventional Reservoirs Under CERCLA

A Overview

In 1980, Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), often referred to as "Superfund," to address the cleanup of hazardous releases nationwide and in so doing, protect human health and the environment from the effects of hazardous substances.[1] The enactment of CERCLA gave the federal government the authority to respond to actual and threatened releases of hazardous substances, pollutants, and contaminants that may endanger public health and the environment,[2] as well as requiring reporting of hazardous substances releases above threshold quantities.[3] CERCLA also established a liability scheme, whereby potentially responsible parties such as owners and operators may be liable for cleanup and other costs stemming from the release (or threatened release) of hazardous substances into the environment from a facility.[4] CERCLA is primarily a remedial statute; it is preventive in that it authorizes responses to threatened releases of hazardous substances, pollutants and contaminants, and to the extent that the liability scheme provides incentives for owners and operators to take care to avoid releases to the environment.

B Relevant Exclusions and Definitions

Under a provision known as the petroleum exclusion, CERCLA's provisions do not apply to releases to the environment that are purely petroleum, including crude oil and natural gas, and fractions of crude oil including the hazardous substances, such as benzene, that are indigenous in those petroleum substances.[5] EPA can respond to releases of hazardous substances, however, even if there are collocated petroleum releases.[6]

CERCLA's liability and reporting provisions do not apply to federally permitted releases – generally, where a hazardous substance is released under a permit issued pursuant to certain federal environmental laws.[7] The statutory definition for such releases exempt from CERCLA also includes:

> any injection of fluids or other materials authorized under applicable State law (i) for the purpose of stimulating or treating wells for the production of crude oil, natural gas, or water, (ii) for the purpose of secondary, tertiary, or other enhanced recovery of crude oil or natural gas, or (iii) which are brought to the surface in conjunction with the production of crude oil or natural gas and which are reinjected.[8]

However, EPA has explained, "t]he National Response Center must be notified in any situation involving the use of injection fluids or materials that are not authorized specifically by State law for purposes of the development of crude oil or natural gas supplies and resulting in a release of a hazardous substance" at or above the threshold reporting quantity.[9]

C CERCLA Hazardous Substance Release Reporting

Where there has been a release of a hazardous substance, CERCLA section 103 requires a person in charge of a facility to report such releases above reportable quantities as soon as he has knowledge of such release to the National Response Center.[10] EPA regulations establish CERCLA hazardous substances and their reportable

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[1] CERCLA, Pub. L. No. 96-510, codified as amended at 42 U.S.C. §§ 9601- 9675 (2012).
[2] 42 U.S.C. § 9604 (2011).
[3] 42 U.S.C. § 9603(a) (2011).
[4] Parties may also be held liable under CERCLA for damages related to the loss, injury or destruction of natural resources.
[5] 42 U.S.C. § 9601(14) (2012) (defining hazardous substance to exclude "petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under [specified provisions of the CWA, RCRA, CAA, and 15 usc 2606], and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). "), § 9601(33) (with similar language, excluding petroleum from the definition of "pollutant or contaminant"). See also http://www.epa.gov/superfund/policy/release/rq/index.htm#exclude. Such releases may be reportable under other laws, such as the Oil Pollution Act of 1990 and Clean Water Act; see 33 U.S.C. § 1321(b)(3)-(5) (2012); 40 300.300(b).
[6] See http://www.epa.gov/superfund/policy/release/rq/index.htm#exclude. Releases of certain waste oils are also regulated under CERCLA. 40 C.F.R. § 302.4 (2012).
[7] 42 U.S.C. § 9601(10) (2012). See also exclusions at 42 U.S.C. § 9601(22) (2012).
[8] 42 U.S.C. § 9601(10)(I) (2012). This provision was included in CERCLA as enacted in 1980. Pub. L. No. 96-510 § 101, 94 Stat. 2768 (1980). See also 53 Fed. Reg. 27,268 (July 19, 1988).
[9] 53 Fed. Reg. 27,268, 27,275 (July 19, 1988).
[10] CERCLA § 103(a), 42 U.S.C. § 9603(a) (2012). The National Response Center is the sole federal point of contact for reporting all hazardous substances and oil spills that trigger federal notification requirements under several laws. Information reported to the Center is disseminated to other agencies, such as EPA, as well as to states.

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quantities.[11] While releases of pure petroleum (e.g., petroleum in which hazardous substances have not increased such as by addition or processing) are excluded, releases of petroleum that have become contaminated with CERCLA hazardous substances are subject to the reporting requirement.[12] Oil and gas well operators would be required to report any releases to the environment of other hazardous substances, for example, if a stored hazardous substance was accidentally spilled onto the ground, or if hazardous substances above the reportable quantity were injected but not authorized by state law.

The National Response Center – managed by the U.S. Coast Guard – receives release reports and forwards them to EPA regions. Although release reports are publicly available, the available search terms do not readily differentiate oil and gas well sites from other types of oil and gas facilities. EPA noted that there had been approximately 200 reports of oil spills from oil facilities in the last five years.

D Relevant EPA Authorities

EPA established the Superfund program to carry out its responsibilities and authorities under CERCLA.[13] Under the Superfund program, EPA implements its authorities to compel parties responsible[14] for contaminating sites -- via releases of hazardous substances -- to clean them up, as well as to enter into agreements with such parties for them to conduct the cleanup. In addition, EPA can itself conduct certain response actions, which may include investigations and cleanup activities, and then seek reimbursement from the responsible parties.

The Superfund cleanup process involves a series of steps during which specific activities --such as investigations and cleanups -- take place or decisions are made. Cleanup work under CERCLA generally involves two categories of actions: short-term removal actions that address immediate threats to human health and the environment, and long-term remedial actions that aim to permanently or significantly reduce contamination.[15]

Several EPA Superfund authorities are particularly relevant to oil and gas well operations:

- Investigations. Under section 104(b), EPA generally may conduct investigation activities with appropriated program funds whenever a hazardous substance is released or there is a substantial threat of such a release, or there is reason to believe a release has occurred or is about to occur.[16] These activities may include monitoring, surveys, testing, and other information gathering, as well as planning, legal, fiscal, economic, engineering, architectural, and other studies or investigations, as deemed appropriate.[17]
- Access. Under section 104(e), EPA has broad access to information as well as authorities to enter property and to conduct inspections and take samples.[18] Specifically, EPA may require a person to furnish information about the identification, nature, and quantity of materials which have been or are generated, treated, stored, or disposed of at a facility or transported thereto, or the nature or extent of a release or threatened release of a hazardous substance or pollutant or contaminant, including related documents and records, among other things.[19] Where there is a reasonable basis to believe there may be a release or threat of release of a hazardous substance or pollutant or contaminant, EPA is authorized to enter a facility or property where such release is or may be threatened, among other things, and may inspect and obtain samples.[20] EPA may obtain access by agreement, warrant, or administrative order.[21] EPA may issue administrative orders or, though the Department of Justice, file civil actions, to compel compliance with requests made under these provisions.[22]
- Removals. Under section 104(a), EPA generally may conduct removal actions at any nonfederal site, among other things.[23] Removal actions are broadly defined, and include actions to monitor, assess, and evaluate the release, the disposal of removed material, and other actions to prevent, minimize, or mitigate damage to the public health or welfare or to the environment such as provision of alternative drinking water supplies.[24]

[11] 40 C.F.R. Part 302, Table 302.4 (2012).
[12] See http://www.epa.gov/superfund/policy/release/rq/index.htm#exclude. Releases of certain waste oils are also regulated under CERCLA. 40 C.F.R. § 302.4 (2012).
[13] Through Executive Order 12580, Superfund Implementation (1987), EPA was delegated key regulatory and enforcement authorities CERCLA granted to the President. In addition, CERCLA, as amended, granted certain authorities directly to the EPA Administrator.
[14] Under CERCLA, potentially responsible parties generally include current or former owners and operators of a site or the generators or transporters of the hazardous substances.
[15] 40 C.F.R. § 300.5 (2011) (defining removal as including containment and removal of hazardous substances or other actions as may be necessary to minimize or mitigate damage to the public health or welfare of the United States or to the environment, and defining remedial action as including actions consistent with permanent remedy to prevent or minimize the release so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment.) For more information, see 40 C.F.R. § 300.415 (removals), 300.430-435 (remedial actions).

[17] CERCLA § 104(a)(1), (b), 42 U.S.C. § 9604(a)(1), (b) (2012).
[18] CERCLA § 104(e), 42 U.S.C. § 9604(e) (2012).
[19] CERCLA § 104(e)(1)-(2), 42 U.S.C. § 9604(e)(1)-(2) (2012).
[20] CERCLA § 104(e)(3)-(4), 42 U.S.C. § 9604(e)(3)-(4) (2012).
[21] See John Cruden, CERCLA Overview (2007).
[22] CERCLA § 104(e)(5), 42 U.S.C. § 9604(e)(5) (2012).
[23] Federal agencies are prohibited from using the Superfund trust fund to finance their cleanups and must, instead, use their own or other appropriations. 42 U.S.C. §§ 9611(e) (2012). In addition to removal actions, EPA may also conduct remedial actions at nonfederal sites which are listed on the NPL, but it is somewhat unlikely an oil and gas well site would be listed on the NPL in light of the petroleum exclusion, among other factors. 42 U.S.C. §§ 9604(a), 9604(c)(1) (2012). The National Priorities List includes sites that EPA determines are among the nation's most seriously contaminated hazardous waste sites to receive attention under the federal Superfund program.
[24] CERCLA § 101(23), 42 U.S.C. § 9601(23) (2012).

- Authorities concerning Releases of a Pollutant or Contaminant. Under section 104(a), EPA has authority to act whenever a release or substantial threat of release into the environment of any pollutant or contaminant may present an imminent and substantial danger to the public health or welfare. This provides EPA with authority over releases of substances that are not CERCLA hazardous but that may harm human health or the environment;[25] however, as noted above, releases that are purely petroleum are excluded. Under this authority, EPA may conduct removals, provide for remedial action, or take any other response measure consistent with the National Contingency Plan.[26]
- Imminent and Substantial Endangerment Authority. In addition, under section 106(a), EPA can issue an administrative order requiring a potentially responsible party to take response actions, where an actual or threatened release of a hazardous substance from a facility may pose an imminent and substantial endangerment to the public health or welfare or the environment. EPA, through the Department of Justice, can also pursue injunctive relief in court in such cases,[27] and courts may impose fines for noncompliance.[28]

CERCLA also provides authorities for EPA to pursue cleanup and related costs from potentially responsible parties, and to enter settlements, as well as providing for liability of potentially responsible parties for damages to federal, state, and tribal natural resources.[29]

EPA has utilized its CERCLA authorities at several locations where it has been alleged that hazardous substance releases from oil and gas well sites have contaminated land or groundwater. In an example at a conventional oil well, in the 1990s, EPA as represented by the Department of Justice reached an agreement in which BP Exploration (Alaska) Inc. pled guilty to a criminal felony count related to CERCLA violations when operators disposed of waste oil and hazardous substances by injecting them down the annuli (the space between the well casing and the surrounding rock) of the oil wells, over a two year period.[30] Under the agreement, BP agreed to spend $22 million to resolve the criminal case and related civil claims, which included claims brought under RCRA, SDWA, and EPCRA, as well as CERCLA.[31] In another example, EPA issued an administrative order on consent under CERCLA sections 104, 106, and 122 requiring cleanup of hazardous substances improperly stored and leaking from tanks at an abandoned oil well site in California.[32] According to the order, the hazardous substances included mixed motor oil, gasoline, methyl tertbutyl ether, and solvents.

More recently, EPA has used CERCLA authorities to conduct investigations and to obtain records relating to alleged hazardous substance releases from oil and gas well sites. For example, EPA is using CERCLA section 104(a) to undertake emergency removal actions including well sampling and provision of alternate water supplies at a site in Dimock, Pennsylvania.[33] EPA is using CERCLA section 104(a) authority to conduct groundwater contamination investigations at Pavillion, Wyoming.[34] EPA officials also referenced its CERCLA section 104(e) authority in requesting information from operators of wells proximate to the Pavillion site.

EPA has used CERCLA section 104(e) in conjunction with other authorities in several "multimedia" enforcement information requests, where EPA seeks information under multiple statutes and for multiple media – air, land, water – that may be affected. In 2011, for example, EPA used CERCLA and other authorities to request information concerning a blowout at a Marcellus shale natural gas well in Bradford, Pennsylvania). In this instance, a well blowout during hydraulic fracturing resulted in the release of flowback fluids to a tributary of the Susquehanna River, as well as combustible gases to the atmosphere.[35] (For more information, refer to Appendix ## discussing actions taken under the Clean Water Act.)

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[25] See CERCLA § 101(33), 42 U.S.C. § 9601(33) (2012). EPA cannot, however, recover its response costs associated with these releases.
[26] EPA has promulgated regulations comprising the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). 40 C.F.R. Pt. 300 (2012). The NCP outlines procedures and standards for implementing the Superfund program.
[27] CERCLA § 106(a), 42 U.S.C. § 9606(a) (2012).
[28] CERCLA § 106(b), 42 U.S.C. § 9606(b) (2012).
[29] See, e.g., CERCLA §§ 107, 122, 42 U.S.C. §§ 9607, 9622 (2012).
[30] See DOJ, news release (Sept. 23, 1999). See also U.S. District Court, Alaska, docket no. 3:99-cv-00549-JKS.
[31] Cite to complaint
[32] See EPA Region 9, CERCLA Docket No. 0-2004-0018 (2004).
[33] See Richard M. Fetzer, On-Scene Coordinator EPA, Action Memorandum to Dennis Carney, Associate Division Director, Hazardous Site Cleanup Division, EPA, re: Request for Funding for a Removal Action at the Dimock Residential Groundwater Site, Jan. 19, 2012.
[34] See EPA, Draft Report, Investigation of Ground Water Contamination near Pavillion, Wyoming, at xi, 1, EPA 600/R-00/000 (December 2011).
[35] Agency for Toxic Substances and Disease Registry, Health Consultation, Chesapeake ATGAS 2H Well Site Leroy Hill Road, Leroy Township, Bradford County, PA (2011)