DEPARTMENT OF ENVIRONMENTAL PROTECTION Bureau of Oil and Gas Management

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TITLE: Addressing Spills and Releases from Oil & Gas Wells and Related Operations.

AUTHORITY: The Oil and Gas Act of 1984, Act of December 19, 1984, P.L. 1140, as amended, (58 P.S. §§601.101-601.607), The Clean Streams Law (35 P.S. §§691.1-691.1001), The Solid Waste Management Act (35 P.S. §§6018.101-6018.1003), and the Pennsylvania Land Recycling and Environmental Remediation Standards Act (35 P. S. §§ 6026.101 - 6026.908) (Act 2).

POLICY: It is the policy of the Bureau of Oil & Gas Management that persons responsible for spills and/or releases from and related to oil and gas well operations shall follow this policy in addressing those spills and releases to ensure protection of people and the environment

PURPOSE: This policy is developed to facilitate a consistent and uniform general response by those working in and for the oil and gas industry to address spills and releases related to oil and gas well operations regulated by the Pennsylvania Department of Environmental Protection (DEP or Department).

APPLICABILITY: This policy applies to any and all parties responsible for spills and releases from oil and gas wells and related operations.

DISCLAIMER: The policies and procedures outlined in this guidance are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements. The policies and procedures herein are not adjudications or regulations. There is no intent on the part of DEP to give these policies and procedures that weight or deference. This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant.

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Guidelines for Reporting a Spill or Release Related to Oil & Gas Operations

When Notification is Required

The person¹ responsible (Responsible Party) for a spill or release of a regulated substance (as defined in 35 P.S. § 6026.103) should report that spill or release to the Department regardless of the quantity spilled. If the spill or release is flowing into waters of the Commonwealth or creates a danger of pollution of these waters or damage to property the Responsible Party must notify the Department immediately. Except as provided below, the Responsible Party should report all other spills and releases, including reportable releases of brine as defined in 25 Pa. Code § 78.1 and those spills and releases related to transportation of oil and gas wastes, to the Department as soon as practicable, but no later than two (2) hours after detecting or discovering the spill or release.

If secondary containment is in place when the spill or release occurs on a well site, the Responsible Party should notify the Department if the quantity of material exceeds forty-two (42) gallons. If the secondary containment is sufficient to contain the release, the Responsible Party should remove the released material from the secondary containment within twenty-four (24) hours. Once removed, the Responsible Party should properly store and/or dispose of the material in accordance with applicable law and regulations.

Under certain circumstances, as specified in the applicable regulations, the Responsible Party must immediately notify emergency responders (including, but not limited to state or local police and the County emergency management official), federal authorities, other state authorities and downstream users of impacted or threatened waters. The details of those requirements are set forth in various Department and other regulations. General Department notification requirements for spills and releases are set forth in 25 Pa. Code § 91.33. Notification requirements for reportable releases of brine at the well site are stated in 25 Pa. Code § 78.66(b). Certain spills and releases trigger other reporting requirements, including but not limited to the following: for residual waste, 25 Pa. Code §§ 293.243 (transfer), 297.253 (processing), 299.145 (storage in surface impoundments) and 299.217-218 (transport); for hazardous waste, 25 Pa. Code §§ 262a.43 (generators) and 263a.30 (transporters).

When material related to oil and gas well operations is spilled or released onto the ground, the material is usually either residual waste or hazardous waste under the Solid Waste Management Act and the Responsible Party shall adhere to all applicable regulations. For example, under 25 Pa. Code § 299.218(a) (relating to wastes from accidents and spills), the Responsible Party that generates or releases residual waste during transportation must notify the Department prior to the disposal or processing of residual waste.

How to Notify the Department

The Responsible Party shall notify the Department by telephone. The Department does not consider voicemail messages, e-mails or text messages to fulfill this notification requirement. Mailed letters or communications from a third party also are not acceptable forms of initial notification.

Spills and releases shall be reported to the appropriate DEP Regional Office listed in Appendix A. The Department also maintains a statewide toll free number, 1-800-541-2050. This number serves as a

¹ For purposes of this policy, a "person" is any legal entity which is recognized by law with rights and duties.

backup to the regional numbers and also supports a reporting mechanism for people who do not know which regional office is responsible for a particular area.

Preparedness, Prevention and Contingency (PPC) Plans

Prior to generating waste, oil and gas well operators are required by 25 Pa. Code § 78.55 (relating to control and disposal plans) to prepare and implement a control and disposal plan under 25 Pa. Code § 91.34 (relating to activities utilizing pollutants). The plan must address the control and disposal of fluids, residual waste and drill cuttings, including tophole water, brines, drilling fluids, additives, drilling muds, stimulation fluids, well servicing fluids, oil, production fluids and drill cuttings from the drilling, alteration, production, plugging or other activity associated with oil and gas wells. Operators can meet this regulatory requirement and the requirements under 25 Pa. Code § 91.34 by developing and implementing a site specific Preparedness, Prevention and Contingency (PPC) Plan. A PPC Plan should identify the appropriate regional office contact numbers and procedures for reporting spills and releases, the clean-ups associated with such spills and releases and all other emergencies to the Department. Copies of the plans must be provided to the Department upon request; shall be available at the well site during drilling and completion activities for review; and include a list of emergency contact phone numbers for the area in which the well site is located. The emergency contact phone numbers must be prominently displayed at the well site during drilling, completion or alteration activities.

Regional Emergency Contact Numbers and the counties they serve are attached in Appendix A.

Guidelines for Cleanup of a Spill or Release Related to Oil & Gas Operations

When following the PPC Plan, the Responsible Party should take immediate action to cease the spill or release of the regulated substance and to prevent migration of the regulated substance from the site of the spill or release and to prevent the regulated substance from reaching or impacting surface water or groundwater. Often, one initial cleanup action required is excavation/removal and appropriate sampling of any soil clearly impacted by the spill or release.

As noted above, material related to oil and gas well operations when spilled or released onto the ground is either residual waste or hazardous waste under the Solid Waste Management Act. Storage, transportation and disposal of such residual and hazardous waste are governed by the Solid Waste Management Act and the Oil and Gas Act. The Department may approve emergency storage methods necessary to prevent or mitigate harm to public health, safety or the environment. Emergency storage may be at the well site, at a permitted facility or at another site approved in writing by the Department.

Remediation of an area affected by a spill or release related to oil and gas operations is mandatory. The Responsible Party must appropriately remove and dispose of waste from the spill or release. For spills of less than 42 gallons at a well site that do not pollute waters of the Commonwealth or create a danger of pollution of these waters or damage property, the Responsible Party shall remove the soil visibly impacted by the spill upon discovery of the spill and disposing of the impacted soil in a method permitted by law. The Responsible Party should notify the Department of its intent to remediate a spill in this manner at the time notification of the spill is made.

For all other spills, the Responsible Party must demonstrate attainment of one of the remediation standards available under the Act 2/Land Recycling Program regulations in Chapter 250 of Title 25 of the Pennsylvania Code. The Responsible Party will be required to follow the administrative process set forth

in those regulations, including the submittal of a Notice of Intent to Remediate (NIR) and a Final Report demonstrating attainment of the selected standard. However, the submission of an NIR and public notification are not necessary for cleanups conducted under the Act 2 background or statewide health standard if the Final Report is submitted to the Department within 90 days of the spill or release.

The forms for completing the NIR, Final Report Summary, and examples of the public notice language are available on the Department's website at

http://www.portal.state.pa.us/portal/server.pt?open=514&objID=552033&mode=2.

The cleanup standard to be attained may be selected from the three standards available under Act 2 – background, Statewide health or site-specific. Not all regulated substances being remediated have a published numeric standard. In those situations where there is no Statewide health standard for a regulated substance, one of the other standards must be selected for that substance. For example, chlorides have a Statewide health standard for releases to groundwater, but do not have a Statewide health standard for releases in soil. For those chloride releases to soil, either the background or site-specific standard must be achieved in order to demonstrate attainment under Act 2.

Guidelines for Restoration and Revegetation of Areas Impacted by a Spill or Release Related to Oil & Gas Operations

Any areas impacted by a spill or release should be restored in a timely manner. In addition to the cleanup requirements for a spill or release in accordance with the Solid Waste Management Act, the Clean Streams Law, Act 2 and 25 Pa. Code § 91.33, well owners or operators are required to restore the well site under Section 206 of the Oil and Gas Act, 58 P.S. § 601.206. According to subsection (a) of that provision, well owners and operators are required to restore the land surface within the area disturbed in siting, drilling, completing and producing a well. The Department considers an area impacted by a spill or release at the well site to have been disturbed and to require restoration. Under Section 206(c), well site restoration must be undertaken within nine (9) months after the completion of drilling any well. Therefore, if a spill occurs at a well pad and any of the spilled material leaves the well pad, the off pad area impacted by the spill must be restored within 9 months of completion of drilling.

Spills that occur on the un-restored area of the well pad must be remediated as soon as possible. Areas affected by a spill or release that are not on a well site should be restored and revegetated as soon as possible during the growing season and within a time period specified by the Department if outside the growing season.

The Responsible Party is expected to consult with the landowner of any area affected by a spill or release. Restoration and revegetation should insure that the restored area is capable of supporting the type of vegetation that was present before the release. The Department considers a well site to be restored under Section 206 when the well site is restored to conditions that support the same potential uses of the land that existed prior to the spill or release, including the vegetation of those areas.

Restoration, including revegetation, is especially important with respect to substances that are not particularly toxic to humans, but that may exhibit phytotoxic properties, such as flowback fluids and production fluids containing chlorides. Plant species vary in their susceptibility to toxic effects of chlorides, and the appropriate levels for restoration and revegetation will in many cases depend on the particular use to be restored. For example, a concentration of 1,000 - 1,500 mg/kg of chlorides in soil

may be considered a benchmark for some agricultural crops, but other sensitive crop species may be impacted at levels of 500-800~mg/kg.

Appendix A DEP Regional Emergency Contact Numbers

Northwest Region	Northcentral Region	Northeast Region
230 Chestnut Street	208 W. Third Street, Suite 101	2 Public Square
Meadville, PA 16335-3481	Williamsport, PA 17701	Wilkes-Barre, PA 18701-1915
814-332-6945	570-327-3636	570-826-2511
(8:00 a.m. to 4:30 p.m. M-F)	(24-hour number including weekends	(24-hour number including
1-800-373-3398	and holidays)	weekends and holidays)
(After hours, weekends and holidays)	Counties: Bradford, Cameron,	Counties: Carbon, Lackawanna,
Counties: Butler, Clarion, Crawford,	Clearfield, Centre, Clinton, Columbia,	Lehigh, Luzerne, Monroe,
Elk, Erie, Forest, Jefferson,	Lycoming, Montour, Northumberland,	Northampton, Pike, Schuylkill,
Lawrence, McKean, Mercer, Venango	Potter, Snyder, Sullivan, Tioga and	Susquehanna, Wayne & Wyoming
and Warren	Union	Susquenanna, wayne & wyoming
	Union	
Southwest Region	Southcentral Region	Southeast Region
Southwest Region 400 Waterfront Drive	Southcentral Region 909 Elmerton Avenue	Southeast Region 2 East Main Street
8	S	S
400 Waterfront Drive	909 Elmerton Avenue	2 East Main Street
400 Waterfront Drive Pittsburgh, PA 15222	909 Elmerton Avenue Harrisburg, PA 17110	2 East Main Street Norristown, PA 19401
400 Waterfront Drive Pittsburgh, PA 15222 412-442-4000 (24-hour number	909 Elmerton Avenue Harrisburg, PA 17110 877-333-1904	2 East Main Street Norristown, PA 19401 484-250-5900
400 Waterfront Drive Pittsburgh, PA 15222 412-442-4000 (24-hour number including weekends and holidays)	909 Elmerton Avenue Harrisburg, PA 17110 877-333-1904 (24-hour number including weekends	2 East Main Street Norristown, PA 19401 484-250-5900 (24-hour number including
400 Waterfront Drive Pittsburgh, PA 15222 412-442-4000 (24-hour number including weekends and holidays) Counties: Allegheny, Armstrong,	909 Elmerton Avenue Harrisburg, PA 17110 877-333-1904 (24-hour number including weekends and holidays)	2 East Main Street Norristown, PA 19401 484-250-5900 (24-hour number including weekends and holidays)
400 Waterfront Drive Pittsburgh, PA 15222 412-442-4000 (24-hour number including weekends and holidays) Counties: Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene,	909 Elmerton Avenue Harrisburg, PA 17110 877-333-1904 (24-hour number including weekends and holidays) Counties: Adams, Bedford, Berks,	2 East Main Street Norristown, PA 19401 484-250-5900 (24-hour number including weekends and holidays) Counties: Bucks, Chester,
400 Waterfront Drive Pittsburgh, PA 15222 412-442-4000 (24-hour number including weekends and holidays) Counties: Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington and	909 Elmerton Avenue Harrisburg, PA 17110 877-333-1904 (24-hour number including weekends and holidays) Counties: Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin,	2 East Main Street Norristown, PA 19401 484-250-5900 (24-hour number including weekends and holidays) Counties: Bucks, Chester, Delaware, Montgomery, and