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June 28, 2010

Mr. Mark W. Howard
United States Environmental Protection Agency
Mail Code 5104A
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1200 Pennsylvania Avenue Northwest
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Dear Mark:

API appreciates the time and effort you and your contract staff took to review the recent revisions to API's SPCC guidance document and template, *Suggested Procedure for Development of a Spill Prevention Control and Countermeasure Plan, API Bulletin D-16*. We are carefully evaluating each comment you provided. We are certain EPA's input to the guidance and template will help improve the bulletin and make it a more widely accepted resource.

This letter is in reference to one comment in the guidance document, comment [kmw34], in "Guidance for Selecting Template SPCC Plan Sections, Section 2 – Facility Information." This comment states, "A natural gas processing facility that does not produce oil or condensate would not be regulated as a *production* facility under the SPCC requirements," and alters the text of the guidance document to unequivocally state, "A natural gas processing plant ("gas plant") is subject to §112.8." Our concerns with this comment are detailed below, and we seek EPA's concurrence with our understanding of SPCC rule applicability.

API agrees that natural gas processing facilities (hereafter "gas plants") that do not produce condensate are not production facilities and either do not fall under the SPCC rule or are regulated by §112.8. The overwhelming majority of gas plants, however, do in fact produce condensate, are located in oil and gas fields, and are an integral part of production, gathering and treating systems for field gas (gas separated from oil and condensate at the well head) from which is separated pipeline quality natural gas. These facilities are production facilities as defined by §112.2, and are regulated by §112.9. Condensate is produced in these facilities as described in "Field Gas Plants," below.

Examples of two types of gas plants that typically do not produce condensate are straddle plants and stand-alone fractionation plants. Straddle plants process pipeline quality natural gas from natural gas transmission lines to remove any remaining LPGs (liquefied petroleum gas, see discussion below), from the natural gas stream. Stand-alone fractionation plants separate a raw LPG stream (a mixture of ethane, propane, butanes and heavier hydrocarbon compounds) into individual LPG streams (i.e. ethane/propane mix, propane, iso-butane, etc.) used for home heating, chemical feedstock, and gasoline blend stock. LPG is a "highly volatile liquid" that

return to the gas state when released to the atmosphere. Thus, EPA has concurred that LPG is not considered oil in the SPCC rule (see 67FR47076).

Field Gas Plants

Condensate is natural gas liquid that is not solely produced from production wells, but is produced throughout the gas gathering process. Condensate is defined in 40CFR60.111b as:

Condensate means hydrocarbon liquid separated from natural gas that condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.

Initial operations at field gas plants include inlet separation and compression. Both of these steps invariably produce condensate, which is stored and transported in the same way that it is at the well head, tank battery, central treating station or compressor station.

Thus field gas plants qualify as “production facilities,” as the term is defined in §112.2:

Production facility means all structures (including but not limited to wells, platforms, or storage facilities), piping (including but not limited to flowlines or intra-facility gathering lines), or equipment (including but not limited to workover equipment, separation equipment, or auxiliary non-transportation-related equipment) used in the production, extraction, recovery, lifting, stabilization, separation or treating of oil (**including condensate**), or associated storage or measurement, and is located in an oil or gas field, at a facility. This definition governs whether such structures, piping, or equipment are subject to a specific section of this part. (Bold added for emphasis)

Note that a “production facility” is not limited to the production of oil, but includes stabilization, separation or treating of oil, including condensate. Condensate continues to be produced in gathering lines until the sufficient NGL (natural gas liquid, includes condensate and lighter hydrocarbons that liquefy under high pressure or low temperature) is removed from the natural gas. NGL and water content are two of the primary specifications of “pipeline quality natural gas”. The primary purpose of a gas plant is to reduce the NGL and water content of natural gas to meet these specifications so that it can be sold.

To assure that condensate does not form in transportation lines, gas plants extract lighter NGL often referred to as LPG (for “liquefied petroleum gas”). As noted, LPG is a “highly volatile liquid” that returns to the gas state when released to the atmosphere; EPA has concurred that LPG is not considered oil under the SPCC rule (see 67FR47076). Thus, most of the equipment that differentiates a gas plant from a compressor or central treating station is not covered by the SPCC rule.

Gas Plants are Considered Production Facilities in Other EPA Regulations

Comment [kmw34] cites the following preamble language in 73 FR 74271, December 5, 2008:

This is **consistent with the approach the Agency has taken in other EPA regulations**, such as the Resource Conservation and Recovery Act (RCRA) Subtitle C regulations for

oil and natural gas exploration, development and production (53 FR 25447, July 6, 1988).
(Bold added for emphasis)

RCRA, however, defines oil and gas exploration and production to include gas plants:

Primary field operations include exploration, development, and the primary, secondary, and tertiary production of oil or gas. Crude oil processing, such as water separation, deemulsifying, degassing, and storage at tank batteries associated with a specific well or wells, are examples of primary field operations. Furthermore, because natural gas often requires processing to remove water and other impurities prior to entering the sales line, **gas plants are considered to be part of production operations regardless of their location with respect to the wellhead.** (Bold added for emphasis)

[Exemption of Oil and Gas Exploration and Production Wastes from Federal Hazardous Waste Regulations, EPA530-K-01-004, October 2002, p. 7, www.epa.gov/osw]

Additionally, EPA's Office of Wastewater Management defines natural gas processing plant as an inherent component of "natural gas extraction field activities."

For the purposes of this final rule, EPA considers the term "processing" to refer to those field operations related to either upgrading of natural gas by removal of contaminants (*e.g.*, carbon dioxide, hydrogen sulfide and water) or the extraction of valuable, higher molecular weight "natural gas liquids" (*e.g.*, ethane, propane, butane, and condensate) or rare gas constituents (*e.g.*, helium and xenon) prior to sale of the gas to an intrastate or interstate gas transmission pipeline. Regardless of the physical size or throughput capacity of a processing facility or its geographic location (either within a single producing field or at a centralized location serving several producing fields), **a gas processing plant** merely serves as an intermediate step in the supply-transmission-distribution chain that transports natural gas from the producing well to the ultimate end-user. Gas processing does not physically or chemically change the basic constituent (methane) in natural gas. Gas processing is not analogous to the term "chemical processing" as is commonly used by chemical engineers to describe manufacturing operations that create finished products in the petroleum and petrochemical refining industrial sectors. The North American Industrial Classification System (NAICS) codes for oil and gas extraction activities (including "natural gas processing") are found under the designation 211 (equivalent to the older Standard Industrial Classification [SIC] code designation 1311). **EPA regards the processing described above as an inherent component of natural gas extraction field activities.** (Bold added for emphasis)

[71 FR 33636, June 12, 2006]

In order to maintain consistency with both RCRA and other Clean Water Act regulations, natural gas processing plants should be included in the definition of a production facility per §112.2, see above ["...all structures...used in the production, extraction, recovery, lifting, stabilization, separation or treating of oil (including condensate)...and is located in an oil or gas field..."]

Historic Industry Interpretation of Production Facility

Further, EPA and the regulated community have always considered gas plants as production facilities. Previous editions of *Bulletin-D16* include in the applicability section the following:

Non-transportation related production facilities include, but are not limited to, oil production lease facilities, mobile or portable drilling or workover rigs operating in a fixed mode, portable fueling facilities, and **gas processing plants** (*Suggested Procedure for Development of a Spill Prevention Control and Countermeasure Plan, API Bulletin D-16, Second Edition, August 1989*). (Bold added for emphasis)

Industry has been developing and implementing SPCC Plans for gas plants following the requirements for production facilities since the rule was issued in 1973; in that time EPA has not questioned this practice. In addition, gas plants have followed §112.9 requirements to develop and implement plans in order to comply with the November 10, 2010 deadline. A change in rule applicability would result in significant cost impacts to revise recently revised plans in order to comply §112.8.

Should gas plants be subject to §112.8, per the comment [kmw34] alteration of the guidance document text, the following questions concerning the constraints of regulatory applicability arise:

- At what point does a gas plant become subject to §112.8?
- If liquid condensate and produced water are removed at the inlet of the gas plant would their containers be subject to §112.9 and only oil containers associated with the gas stream be subject to §112.8?
- Gas streams do not contain liquid hydrocarbons at atmospheric pressure so the only oil associated with the gas stream would be for auxiliary equipment (e.g., compressors). If the natural gas is processed to remove liquids and re-injected back into the formation to maintain formation pressure would this facility be associated with production and subject to §112.9?
- If the gas stream was sweetened before reinjection back into the formation would that make a difference?
- Are enhanced oil recovery plants considered production or non-production?

Summary

EPA regulations such as RCRA and the Clean Water Act include gas plants as production facilities. In order to maintain consistency between EPA regulations, SPCC regulations should also include gas plants as production facilities. *Bulletin D-16* has consistently advised industry that production facilities include gas plants. EPA has been inspecting gas plants as production facilities since the rule became effective in 1974. EPA Region personnel are conducting outreach programs and responding to questions that gas plants are production facilities. Nothing in the revised SPCC Rule would suggest EPA changed the applicability of gas plants as production facilities.

If EPA now maintains gas plants are not production facilities, EPA will need to begin an immediate outreach program to their Regions and the regulated community, as well as grant the many extension requests that will follow. API member companies operate only a percentage of

gas plants in the U.S.; other trade organizations such as Gas Processors Association (GPA) should be contacted in this event.

Please clarify EPA's position on this issue, and the intent behind comment [kmw34]. If you would like to meet with API staff and members on this issue, please contact me by e-mail or at the number above.

Sincerely,

A handwritten signature in black ink that reads "Roger E. Claff". The signature is written in a cursive, slightly slanted style.

Roger Claff, P.E.
Senior Scientific Advisor

cc: K. Cauthen
M. See
K. Simon
S. Meadows
R. Chittim
P. Searles