

June 8, 2012

The Honorable Mathy Stanislaus  
Assistant Administrator  
Office of Solid Waste and Emergency Response  
U.S. Environmental Protection Agency  
Ariel Rios Federal Building  
1200 Pennsylvania Ave., NW  
Washington, DC 20460

Re: The Regulatory Status of Gases that are not Contained in a Container

Dear Assistant Administrator Stanislaus:

We would like to bring to your attention an issue of significant concern to all of the undersigned representatives of manufacturing facilities, energy generation facilities, waste management facilities, and wastewater treatment plants. We recently learned that EPA is refusing to advise state regulators that gases that are not contained in a container are not solid wastes, notwithstanding the Agency's long-standing position that such gases are not solid wastes; the April 13, 2011, letter from Suzanne Rudzinski, Director, Office of Resource Conservation and Recovery to Tim Hunt, American Forest & Paper Association; and the preamble discussion of this issue in the December 23, 2011, Reconsideration and Proposed Amendments to the Commercial and Industrial Solid Waste Incineration (CISWI) Rule and the Non-Hazardous Secondary Materials (NHSM) Rule.

EPA created confusion over the regulatory status of gases that are not contained in a container in a response to comments document accompanying the March 2011 NHSM Rule. Realizing its mistake, EPA clarified the status of such gases in both the April 13, 2011 letter and the December 23, 2011, preamble. In these documents, EPA affirmatively states that the "burning of gaseous material, such as in fume incinerators (as well as other combustion units, including air pollution control devices that may combust gaseous material) does not involve treatment or other management of a solid waste (as defined in RCRA section 1004(27))."

Following release of the April 13, 2011 letter, the regulated community thought the issue of what is a contained gas was settled. However, we now learn that it may not be. Notwithstanding this letter, it is our understanding that EPA has refused to clarify to North Carolina air pollution control regulators that the burning of gaseous fuel derived from landfill gas and the combustion of gases in flares is not the burning of a solid waste. As a result, North Carolina has determined that such burning may be the combustion of a solid waste, suggesting that a flare would have to meet CISWI standards and a gaseous fuel would have to meet the processing and legitimacy criteria of the NHSM Rule.

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For example, in addition to confusion over permits for landfills, we are aware of one title V permit application for a flare in North Carolina that has been halted over this issue. The subject permit application is for temporary short-term incineration of HVLC gases (2-3 weeks). Without an alternative source of control during this one-time maintenance event, the facility would have to cease operation and the cost of lost production revenue could be as much as \$6 million. Add to that the repercussions of potential loss of customers looking elsewhere for product when the manufacturing facility is down and the effects could be permanent. Further, if the state extends its new interpretation of "contained gaseous materials" to the primary units that control these types of gases, then facilities all over the state may have to shut down. Finally, if this state and others apply the same interpretation to all combustion of gases, the implications across all manufacturing sectors will be enormous. See the attached email exchanges with North Carolina regulators.

Also attached is a May 2, 2012 Questions and Answers document that is posted on the North Carolina web site. As you can see from this document, North Carolina relies on both an August 5, 2011, letter from Suzanne Rudzinski to Sue Briggum of Waste Management, as well as the response to comments document accompanying the March 21, 2011 Non-Hazardous Secondary Materials Rule to reach the conclusion that gases that are not contained in a container may still be solid wastes. The attached documents highlight the importance of clarifying that *all* gases are not solid wastes unless combusted while in a container. EPA needs to clarify that this is the position of the Agency not only under the Clean Air Act, but also under RCRA.

Please be aware that EPA's unwillingness to provide clarification to state regulators regarding the RCRA status of gaseous materials is an issue that goes far beyond landfill gas. As demonstrated by the reaction of North Carolina regulators, discussed above, a statement by EPA that one gas that is not contained in a container is a solid waste brings into question the status of all such gases, and the regulatory status of the units in which they are combusted.

It is our understanding that some at EPA have attempted to distinguish landfill gas from other uncontained gases by referencing the attached March 6, 1986, letter from Marcia Williams, Director, Office of Solid Waste, to Mr. Lanier Hickman, Executive Director, Governmental Refuse Collection and Disposal Association. However, that letter provides no basis for an EPA determination that landfill gas is a solid waste when combusted. In fact, in Volume U of the RCRA Definition of Solid Waste Compendium, this letter is included in the subtopic "uncontained gases" so it is clear that EPA has not interpreted this letter as authority for determining that landfill gas is solid waste.

Instead, the 1986 letter responds to a question regarding the regulation of gaseous emissions from both hazardous and non-hazardous waste landfills. The letter asserts the authority to regulate such emissions, relying on 3004(n) and 4004(a) of RCRA.

Section 3004(n) is stand-alone authority for EPA to promulgate regulations controlling air emissions from hazardous waste treatment, storage, and disposal (TSD) facilities. This section of RCRA does not identify such emissions as solid wastes and the authority granted under this

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section of the statute is completely independent of EPA's authority over solid wastes. EPA regulations promulgated under this authority do not purport to identify gases as solid wastes.

Section 4004(a) is stand-alone authority for EPA to promulgate regulations establishing criteria for sanitary landfills. This section of RCRA does not discuss gaseous emissions, much less identify them as solid wastes. EPA regulations promulgated under this section of RCRA require the control of explosive gases and compliance with the Clean Air Act. They do not purport to identify gases as solid wastes. If EPA now believes that this section of RCRA represents a determination that gases generated in landfills are solid wastes, then landfills would have to cease flaring methane gas, unless the flares comply with the 2000 CISIW Rule.

This issue has enormous consequences for the undersigned sectors of our nation's economy. Thousands of facilities are operating today based on EPA's interpretation of the definition of contained gaseous material in the April 13, 2011, letter to Tim Hunt. This interpretation is now being called into question and EPA cannot let the present ambiguity continue. Should EPA define a gas that is not in a container a solid waste, then EPA will shut down significant portions of the manufacturing sector, disrupt the management of sanitary landfills and wastewater treatment plants, and potentially eliminate the future ability of communities and facilities to derive energy from landfill gas as well as biogas generated during wastewater treatment. The same consequences will result from EPA inaction and refusal to clarify what constitutes a contained gas.

Given the fact that this issue is impacting pending permit applications, we respectfully urge you to immediately make it clear to state regulators and the regulated community in the forthcoming CISWI and NHSM rules that, for all gases, neither a combustion device nor a conveyance such as a pipe or duct that delivers gas to a combustion device constitutes a container, and that a gas that is not contained in a container cannot be considered a solid waste under RCRA and is not subject to regulation under the Clean Air Act Section 129 incinerator rules when combusted.

Thank you for your consideration of this issue.

Sincerely,

American Chemistry Council  
American Coke and Coal Chemicals Institute  
America Forest & Paper Association  
American Foundry Society  
American Iron and Steel Institute  
American Petroleum Institute  
American Wood Council  
Brick Industry Association  
Celanese Corp.  
Council of Industrial Boiler Owners  
Delaware Solid Waste Authority

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KapStone Paper and Packaging Corporation  
Manufacturers and Chemical Industry Council of North Carolina  
National Association of Clean Water Agencies  
National Solid Wastes Management Association  
Portland Cement Association  
Rubber Manufacturers Association  
The County Sanitation Districts of Los Angeles County  
Utility Solid Waste Activities Group  
Waste Management

cc: Robert Perciasepe, EPA  
Suzanne Rudzinski, EPA  
James Berlow, EPA  
Peter Tsirigotis, EPA  
David Cozzie, EPA  
Kevin Neyland, OMB  
Dominic Mancini, OMB  
Kevin Bromberg, SBA

Attachments:

NC Email on Landfill Gas, April 26, 2012 from Sheila Holman  
NC Landfill Gas Q&A, May 2, 2012  
NC Email on Flares, June 1, 2012 from Donald Vandervaart

**From:** Holman, Sheila  
**Sent:** Thursday, April 26, 2012 3:35 PM  
**Cc:** Abraczinskas, Michael; Vandervaart, Donald; Evans, John  
**Subject:** Landfill Gas

Following is a response to the material you provided to me on April 13, 2012 regarding landfill gases and several pending air quality permits.

The NCDQA is required through a delegation agreement to implement certain federal rules, including the Commercial and Solid Waste Incinerator (CISWI) rule that was finalized by the federal EPA in March 2011. Implementation of the CISWI rule requires a threshold characterization of the material to be burned – that is whether the material is a solid waste. In an action parallel to the March 21, 2011, final CISWI rule, the EPA promulgated a final rule that identifies the standards and procedures for identifying whether non-hazardous secondary materials (NHSM) are or are not solid waste when used as fuels or ingredients in combustion units. The NHSM rule did result in some confusion leading to requests for clarification. In an August 5, 2011 response to an inquiry about how landfill gas is characterized under the NHSM rule, the Director of the EPA Office of Resource Conservation and Recovery provided that landfill gas is not a traditional fuel, but could qualify as non-solid waste fuel under the NHSM rule provisions. August 5, 2011 letter from Suzanne Rudzinski, Director, [EPA] Office of Resource Conservation and Recovery to Ms. Sue Briggum, VP, Federal Public Affairs, Waste Management. More specifically, the Ms. Rudzinski stated that landfill gas “may” be a fuel “processed from waste material, but they would have to meet all the requirements necessary to be considered a processed commodity fuel.” Rudzinski letter at 2.

Despite the apparent clarity of EPA’s response, there persists continued misinformation regarding the characterization of landfill gas as a solid waste. Several recent applicants for projects involving the permitting of new natural gas-fired engines have interpreted the letter as a dispositive statement that landfill gas is not a solid waste because it is not a “contained gaseous material.” It is instructive, that if EPA did not consider landfill gas to be a contained gaseous material, there would be no need for any inquiry or analysis under the NHSM rule at all. In addition, the current definitional rule provides that “contained” simply means that “the non-hazardous secondary material is stored in a manner that adequately prevents releases or other hazards to human health and the environment considering the nature and toxicity of the non-hazardous secondary material.” When EPA issued the NHSM rule, several commenter’s directed EPA to historic documents claiming support for a conclusion that landfill gas in a pipe is not a contained gaseous material. EPA responded to these comments by stating “In the first place, we are unable to find any Agency reasoning supporting previous EPA interpretations that only gases in containers may be considered “contained.” Based on the facts of this case, EPA cannot see how gaseous secondary material that is generated in any particular system and is somehow sent to a gas-fired boiler, even through a pipeline, can be considered an “uncontained gas.” EPA NHSM, Response to Comments, at 212. Numerous trade organizations filed for reconsideration of the NHSM rule, in part, because of treatment of landfill gas under the new rules (NHSM/CISWI). For example, the Council of Industrial Boiler Operators (CIBO) filed a petition stating (in part), “The net effect of these rules will strongly discourage the use of renewable fuels such as biogas, landfill gas, and other resources where the clear policy direction from Congress in RCRA, EPA’s own programs such as the Landfill Methane Outreach Program [LMOP], and policy commitment of this Administration is to encourage the use of renewable fuels.”

Notwithstanding what appeared to be EPA’s clear language and intent discussed above, the NCDQA permits section decided to ask for further clarification and contacted EPA’s Office of Solid Waste in Washington DC. The NCDQA Permits section forwarded the August 5, 2011 Rudzinski letter to George Faison asking if it was in fact EPA’s position that landfill gas was not a solid waste. Below is the request and the response:

6/7/2012

**REQUEST:** George [Faison] and Toni [Jones],

North Carolina continues to receive comments and letters from some of the landfill operators in our state looking to burn landfill gas claiming that the EPA has already determined that landfill gas is not a solid waste. We have asked the sources to provide that determination and they typically proffer the August 2011 Rudzinski letter stating that EPA has not changed its position with regard to "contained gaseous material." The letter then states that landfill gas is not a traditional fuel. All this would appear to suggest to North Carolina that landfill gas is considered a non-hazardous secondary material that would be eligible to qualify as non solid waste under one of the several provisions contained in the March 2011 NHSM rule

At the risk of being too blunt,

- a) Has the EPA determined that landfill gas is not a solid waste? or
- b) Is landfill gas presumed to be a NHSM and therefore must it go through the provisions of the NHSM rule (e.g. legitimacy) in order to not be considered solid waste?

We, as a delegated agency implementing NSPS, want to properly implement this set of provisions and so we don't have a particular position either way. Thanks for your consideration of these questions.

**ANSWER:**

I apologize for not responding to your questions directly, but the landfill gas issues you outlined below also have been raised in comments to the December 23, 2011 proposed revisions to the Non-Hazardous Secondary Materials rule. We have concluded that, to ensure consistency, we need to address those comments in the context of the final rule which is scheduled to be issued in late spring.

Don't hesitate to call if you have questions in the interim.

George Faison  
U.S. Environmental Protection Agency  
OSWER, ORCR  
1200 Pennsylvania Ave. NW  
Mail Code 5303 P  
Washington, DC 20460

Finally, it may also be worth noting that North Carolina treats landfill gas as equivalent to natural gas for the purposes of implementing its state air toxics permitting program. Unlike the NC air toxics regulation, the CISWI and NHSM rules are the result of EPA rulemaking and NC's role is limited to implementation and not interpretation. Several applicants have also observed that other states are not applying the NHSM regulation to landfill gas. To that end, the cognizance of other states with respect to this issue (i.e. whether they chose to implement the NHSM rule) is of academic interest, however decisions made by those state agencies do not affect NC's obligation to the EPA to implement the CISWI and NHSM regulations. It may also be important to note that the NCDAQ cannot, and in fact does not, refuse to issue air quality permits to any of the landfill gas projects. As EPA stated in their August 5, 2011 letter, if the applicant can "meet all of the requirements necessary to be considered a processed commodity fuel, a permit will be issued without the CISWI requirements. In the alternative, if the applicant cannot make that demonstration, a permit will be issued with the CISWI requirements." In either case a permit is not refused.

In conclusion, it is NCDAQ's belief that landfill gas to be combusted in boilers is in fact subject to the legitimacy criteria contained in the NHSM rule. Therefore, we will continue to follow this interpretation until the final NHSM rule is issued. At that time, we will evaluate the final rule to determine if our procedure needs to be modified.

Thank you for bringing the issue to my attention. Let me know if you would like to discuss the issue and our interpretation further.

6/7/2012

Sheila

Sheila Holman, Director  
NCDENR, Division of Air Quality  
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Raleigh, NC 27699-1641  
Phone/Fax: (919) 707 8430  
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## Landfill Gas & Solid Waste Questions and Answers (version 1.1; May 2, 2012)

### Why are landfill gas projects being asked to address issues related to "solid waste?"

In 2011 the federal EPA promulgated revised regulations governing the combustion of commercial and industrial solid waste. <http://www.epa.gov/ciswi/ciswi/12/ciswi/ciswi.html> The rule is commonly referred to as the CISWI rule. In an action parallel to the CISWI rule, the EPA promulgated a final rule that identifies the standards and procedures for identifying whether non-hazardous secondary materials (NHSM) are or are not solid waste when used as fuels or ingredients in combustion units.

<http://www.epa.gov/waters/nonhaz/define/> The determination of whether landfill gas is, or is not, a solid waste is important to determining the applicable emission control requirements. If landfill gas is a solid waste then federal CISWI regulations apply and permits will be issued to sources who can demonstrate compliance with the CISWI requirements. If the landfill gas is not a solid waste, permits will be issued for sources who can demonstrate compliance with all applicable non-CISWI regulations.

### Is landfill gas a "solid waste"?

In a written response to an inquiry about how landfill gas is characterized under the NHSM rule, the Director of the EPA Office of Resource Conservation and Recovery provided that landfill gas is not a traditional fuel, but could qualify as non-solid waste fuel under the NHSM rule provisions. Letter from Suzanne Rudzinski, Director, [EPA] Office of Resource Conservation and Recovery to Ms. Sue Briggum, VP, Federal Public Affairs, Waste Management (August 5, 2011). More specifically, the Ms. Rudzinski stated that landfill gas "may" be a fuel "processed from waste material, but they would have to meet all the requirements necessary to be considered a processed commodity fuel." Rudzinski letter at 2.

<http://www.epa.gov/orc/wmh/12/define/pdfs/landfillgas.pdf> According to this letter, landfill gas may only be considered a non-solid waste if the requirements, commonly referred to as the legitimacy criteria, are satisfied.

Under the NHSM rule the EPA did not provide a categorical exemption providing that all landfill gas is a non-solid waste. Therefore, where a source seeks authorization to burn landfill gas, the permitting authority (e.g., NC DAQ) must evaluate the material against the legitimacy criteria on a case-by-case basis to make a determination of whether the material is a solid waste or non-solid waste.

### What are the "legitimacy criteria?"

In brief, in order for a NHSM to be classified as a non-solid waste, the material must meet the following three criteria:

- 1) The NHSM (e.g., landfill gas) must be managed as a valuable commodity;
- 2) The NHSM must have a meaningful heating value and be used as a fuel in a combustion unit that recovers energy; and,
- 3) The NHSM must contain contaminants at levels comparable to, or lower than, the concentrations in traditional fuels which the combustion unit is designed to burn. This requires a direct comparison of the contaminant levels in the NHSM and the traditional fuel.

The complete legitimacy criteria are contained and detailed in EPA's NSHM rule.

[http://www.epa.gov/ttnsys/ake/FR\\_2011\\_05\\_21/err/2011-4402.pdf](http://www.epa.gov/ttnsys/ake/FR_2011_05_21/err/2011-4402.pdf)

#### **Is landfill gas a "contained gaseous material"?**

Traditionally, and in prior revisions of the NSHM rule, the EPA defined solid waste as "..., and contained gaseous material." Therefore, "uncontained gaseous materials" were categorically excluded from the definition of solid waste.

During the NSHM rulemaking process, various parties submitted comments to the US EPA asserting that landfill gas has been and should continue to be classified as an "uncontained gaseous material," and therefore excluded from the definition of solid waste. When the EPA issued the final NSHM rule in 2011, the preamble to the final rule responded to these comments as follows: "[W]e are unable to find any Agency reasoning supporting previous EPA interpretations that only gases in containers may be considered 'contained.' Based on the facts of this case, EPA cannot see how gaseous secondary material that is generated in any particular system and is somehow sent to a gas-fired boiler, even through a pipeline, can be considered an 'uncontained gas.'" EPA NSHM, Response to Comments, at 212.

#### **Why is North Carolina requiring sources address these federal regulations?**

The North Carolina Division of Air Quality (NCDAQ) implements two basic sets of air quality regulations for stationary sources. The first set of regulations is developed by the NCDAQ for protection of the ambient based National Ambient Air Quality Standards (NAAQS). The second set of regulations are regulations developed by the federal EPA and these include many technology-based standards including but not limited to the CISWI and NSHM rules discussed above. With respect to the latter, North Carolina is delegated by the federal EPA to implement these standards, and must implement and enforce these regulations according to a delegation agreement. Other state permitting agencies may or may not have delegation agreements.

#### **Is EPA going to provide further clarification on the issue of landfill gas?**

On December 23, 2011 the federal EPA proposed changes to the NSHM regulation. See [http://www.epa.gov/osw/tpo/err/dsv/rulemaking\\_err03011](http://www.epa.gov/osw/tpo/err/dsv/rulemaking_err03011). According to the EPA, the landfill issues discussed above are being considered in this proposed rulemaking.

**From:** Vandervaart, Donald [mailto:donald.vandervaart@ncdenr.gov]  
**Sent:** Friday, June 01, 2012 3:10 PM  
**Subject:** RE: Application No.

Amy, right now we are faced with what appears to be conflicting language (although your attached memo could have been clearer). In addition, we have discussed this issue many times with another staffer at the EPA. When faced with comments the EPA published in the federal registry versus a memorandum issued by a staffer, we are always unsure of priority. I recall a similar position briefed all the way to the Supreme Court re Duke Energy regarding the interpretation of the definition of the term "modification" in different programs of the CAA. In that case, a senior staffer (Ed Reich) issued a memorandum taking a position that was later disavowed by the EPA. The EPA (and DOJ) told the court:

"... an EPA employee could not change EPA's position through such informal, unofficial statements. USB37-38. Duke calls them "formal determinations" but admits that Reich's office provided "guidance" and [\*14] "recommendation[s]" (DB70-71), not statements that had the force of law or bound agency decisionmakers."

Later, the EPA described Mr. Reich as follows.

"Similarly, a cited transcript indicates that the statements "represent what [Reich] believed was [EPA's] position" but that he was "about five steps below the administrator"

This implies that steps from the administrator matter. Would you happen to know how many steps your Ms. Rudzinski is below Lisa Jackson? The EPA itself does not expect us to listen to one at least 5 steps below, maybe less.

We have requested additional confirmation from the EPA, including submitting a draft title V permit (which includes a flare subject to CISWI) to region 4 with a request to target it for their review. Until we receive something more substantive, we believe we are correct in our interpretation. Thank you for your help in this matter.

Donald van der Vaart, Section Chief, Permitting  
NC DENR, Division of Air Quality  
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Raleigh, NC 27699-1641  
Phone/Fax: 919 707-8475  
www.ncair.org  
Donald.vanderVaart@ncdenr.gov

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**From:** Thaker, Rahul  
**Sent:** Tuesday, May 22, 2012 10:44 AM  
**Subject:** Application No .

The EPA has informed the DAQ that materials burned in flares could be subject to CISWI. This conclusion is dependent upon whether the material to be burned is a solid waste under EPA's non-hazardous secondary material (NHSM) rule. Therefore, please analyze the NSPS CCCC (CISWI) applicability with a particular attention to the NHSM rule.

The application processing has stopped as of today until we receive the requested information.

6/7/2012

Rahul

Rahul P. Thaker, P.E., QEP  
Environmental Engineer  
NCDENR Division of Air Quality  
Permitting Section  
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