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The Coalition for Responsible Waste Incineration (CRWI) appreciates the opportunity to submit comments on *Commercial and Industrial Solid Waste Incineration Units: Reconsideration and Proposed Amendments; Non-Hazardous Secondary Materials that are Solid Waste: Proposed rules; Reconsideration of final rule*. 76 FR 80,452 (December 23, 2011). CRWI is a trade association comprised of 23 members. CRWI has a number of members that will be impacted by this rulemaking. CRWI is submitting comments on two specific issues (attached) of the non-hazardous secondary materials portion of this proposed rule.

Thank you for the opportunity to comment on this proposed rule. If you have any questions, please contact me at (703-431-7343 or mel@crwi.org).

Sincerely yours,

Melvin E. Keener, Ph.D.
Executive Director

cc: CRWI members
G. Faison – EPA

Specific comments

1. CRWI suggests additional modifications to definition of contaminants.

EPA is proposing to modify the definition of contaminants for the purpose of determining whether a non-hazardous secondary material (NHSM) is solid waste (76 Fed. Reg. 80,470). CRWI supports some of those proposed modifications and has suggestions for other modifications. We agree that the reference to products of incomplete combustion are duplicative and support the removal of that phrase. We also agree that there is no need to include compounds that are not expected to be found in any non-hazardous secondary material.

However, we are concerned that the definition as proposed includes pollutants listed in Clean Air Act section 112(b). CRWI believes that this exceeds EPA's authority. Congress created sections 129 and 112 at the same time during the Clean Air Act Amendments of 1990. They made a conscious choice to create two different lists of pollutants, one for section 112 and one for section 129. While there is an overlap in the list, the list of pollutants for section 129 is specific for the combustion of solid waste. The proposed definition for contaminants is used to determine whether a secondary material is a solid waste for the purpose of combusting that solid waste. As such, the only pollutants that should be of concern when making this decision are the ones listed in Section 129 or their precursors (e.g., chlorine, nitrogen, and sulfur), since that would be the governing section if the material is a solid waste. The combustion of any secondary material that is not a solid waste will be regulated under Section 112 and are not a concern for this particular definition. Based on this logic, we believe that this definition of contaminants should not contain any references to the section 112 list of pollutants.

In using the section 129 pollutants as a basis, EPA should more fully develop the elemental approach for NHSM similar to what they did when developing in-spec used oil in 40 CFR 279 (elemental species as opposed to individual compounds). For example, a section 129 pollutant of concern is sulfur dioxide. EPA should be interested in the underlying presence of sulfur-bearing materials in the NHSM as opposed to individual sulfur-containing compounds. It is the total sulfur concentration in NHSM that can effect emissions of sulfur dioxide, not necessarily the concentration of any individual compound. The same could be said for lead, cadmium, mercury, and chlorine. Carbon and oxygen would not be considered since they would not be contaminants as EPA admitted in the footnote at 76 FR 80475, and carbon monoxide could be eliminated as EPA suggested in the same footnote. Oxides of nitrogen could originate from both atmospheric nitrogen and NHSM constituents, so that nitrogen content in the NHSM should still be addressed as total nitrogen. Particulate matter, opacity, and dioxin/furan are more products of combustion and/or post-combustion, as opposed to constituents in NHSM.

Based on these concerns, CRWI suggests the following changes to the definition of contaminants (using ~~strikethrough~~ to show text deleted and underline to show text added).

Contaminants means all pollutants listed in Clean Air Act sections ~~112(b) and 129(a)(4)~~, with modifications outlined in this definition to reflect constituents found in non-hazardous secondary materials prior to combustion. The definition includes the following elemental contaminants that commonly form Clean Air Act section ~~112(b) and 129(a)(4)~~ pollutants: ~~Antimony, arsenic, beryllium, c~~Cadmium, chlorine, ~~chromium, cobalt, fluorine,~~ lead, ~~manganese,~~ mercury, ~~nickel,~~ nitrogen, ~~selenium,~~ and sulfur. The definition does not include the following Clean Air Act section ~~112(b) and 129(a)(4)~~ pollutants that are either unlikely to be found in non-hazardous secondary materials prior to combustion or are adequately measured by other parts of this definition: Hydrogen chloride (HCl), ~~chlorine gas (Cl₂), hydrogen fluoride (HF),~~ nitrogen oxides (NOX), sulfur dioxide (SO₂), ~~fine mineral fibers,~~ particulate matter, ~~coke oven emissions, diazomethane, white phosphorus, titanium tetrachloride, m-cresol, o-cresol, p-cresol, m-xylene, o-xylene, and p-xylene,~~ carbon monoxide, and opacity.

2. Contained gaseous materials.

On March 21, 2011, EPA promulgated a rule for identifying which non-hazardous secondary materials are “solid wastes” for the purpose of determining whether a combustor is governed by Section 129 or 112 of the Clean Air Act. 76 Fed. Reg. 15,456. If the material is a solid waste, it is governed by Section 129; if not a waste, it is regulated by Section 112.

In making its interpretation, the Clean Air Act states that EPA must follow the definition of solid waste as defined by the Solid Waste Disposal Act. See 42 U.S.C. § 7429(g)(6); CAA § 129(g)(6). Under the SWDA, the term “solid waste” is defined to mean

any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or *contained gaseous material* resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 1342 of title 33, or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923) [42 U.S.C. 2011 et seq.]

42 U.S.C. § 6903(27) (emphasis supplied).

Since some of the secondary materials addressed in the identification rule are in a gaseous state, one issue is the Agency's view of its statutory authority over gaseous material. In its Response to Comments, EPA makes statements that appear to revise the Agency's long-held interpretation that gases contained in pipes are not solid wastes. The Agency states:

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 Response to Comments, EPA-HQ-RCRA-2008-0329-1837, at 213. This created a great deal of concern among the regulated stakeholders about whether EPA had changed their long-standing interpretation of how "contained gaseous materials" are regulated. CRWI was one of the stakeholders that submitted background papers documenting previous Agency interpretations. In response to this concern, EPA issued a letter to the American Forest and Paper Association making it clear that they had not changed their interpretation. In addition, the Agency put the following statement in the proposed reconsideration rule.

The response does not change any previous EPA positions. We clarify here that the Agency's previous statements and interpretations remain effective. Thus, 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).) Thus, we are stating again in the preamble to today's proposed rule that we are not changing any of our previous interpretations as it relates to whether "contained gaseous material" is a solid waste.

76 Fed. Reg. at 80,473. CRWI thanks the Agency for both of these clarifications. We believe that this will help the regulated community determine what is covered by this rule. The primary purpose of this comment is to place the following documentation of the Agency's previous interpretation that gases contained in pipes are not solid wastes into the record. All of these documents show that throughout EPA's history, it has consistently interpreted the statutory definition of solid waste to bar it from regulating materials contained in pipes under RCRA.

A. June 24, 1982, Rulemaking on Incinerator Standards.

The first document found was published on June 24, 1982. This rule promulgated significant changes to the initial RCRA incinerator regulations that were promulgated on January 23, 1981. In response to questions about the regulatory status of "fume incinerators" EPA stated:

Fume incinerators which are used to destroy gaseous emissions from various industrial processes, for example, are not subject to regulation under RCRA. *In general, the RCRA standards do not apply to fume incinerators since the input is not identifiable as a solid waste, according to the definition set forth in 261.2.*"

47 Fed. Reg. 27,520, 27,530/3 (June 24, 1982) (emphasis supplied). While the regulatory definition of solid waste promulgated at 261.2 was different in 1982 than it is today, it would have covered fumes being sent to incinerators as "other waste material" except for EPA's interpretation, announced in this Federal Register, that the material is not a "contained gaseous material." Since there was no basis under the rules for excluding these materials, EPA was making a statutory interpretation that gases contained in pipes were not solid wastes. The Federal Register notice is included as Attachment A.

B. December 17, 1984, Regulatory Determination Letter from John Skinner to James Scarborough, (9441.1986(36)).

In December 1984, John Skinner, Director of EPA's Office of Solid Waste, wrote to James Scarborough, Chief of the Residuals Management Branch at Region IV, regarding the construction of a facility to treat fluorine (P056) and other gases vented from compressed gas cylinders. In his letter, Mr. Skinner referred to a letter EPA wrote to the Compressed Gas Association in 1981 (that we have not been able to procure.) As explained by Mr. Skinner, the 1981 letter stated that gases removed from cylinders were not solid wastes. Mr. Skinner wrote:

According to the letter If the gas supplier decides to discard the contents of the returned cylinders, any liquid or physically solid waste removed from the cylinders are subject to RCRA if they are hazardous waste. However, the letter goes on to say that the handling of gaseous residues removed from the cylinders and neutralization or scrubbing of gases prior to release are not subject to RCRA regulation.

Mr. Skinner concludes: "Therefore, your conclusions are correct. The facility is not a RCRA treatment facility for any handling of the gases removed from the cylinders. Any liquid or solid residues derived from the cylinders or from treatment of cylinder contents that are listed in 40 CFR 261 Subpart D or are hazardous under Part 261 Subpart C are subject to Subtitle C hazardous waste regulations." This document is attached as Attachment B.

C. April 2, 1986, Regulatory Determination Letter from Marcia Williams to Steve Wassersug, (9442.1986(03)).

The third reference is contained in a regulatory determination letter sent from the Director of the Office of Solid Wastes, Marcia Williams, to Steve Wassersug, Director of the Hazardous Waste Management Division. In that letter, Ms. Williams responds to several questions that Mr. Wassersug asked in an earlier memo regarding the regulation of spent carbon. In response to a question about which Part 264 standards apply, Ms. Williams states:

Your concern that a determination that the off-gas is an unregulated emission would have adverse ramifications for incineration facilities does not appear to be a major problem. You express concern that an incinerator operator could vaporize his waste in a nonflame device prior to injection in an incinerator and claim that the unconfined gas is an unregulated treatment emission. Such a claim is not likely to be successful because the operator would need to show that the vaporization constitutes bona fide recycling not integral to the incinerator. We don't believe such a showing can be made.

This statement indicates two things: first, that it was common knowledge at EPA that gases in pipes were exempt from regulation because they were not considered contained gaseous materials. Second is that EPA's jurisdictional hook in this situation was not that the gas was contained, but rather that the vaporization process was actually part of a treatment process that would trigger regulation. Ms. Williams letter is included as Attachment C.

D. July 15, 1986, Regulatory Determination Letter from Matt Straus to Gregory Harvey, (9441.1986(54)).

The fourth document is a regulatory determination letter from Matt Straus, Chief of the Waste Characterization Branch, to Gregory Harvey, an Industrial Hygienist at the Newark Ohio Naval Air Station. In it, Mr. Straus was responding to a request regarding whether activated carbon canisters that are saturated with vapors from listed spent solvents must be treated as a hazardous waste. Mr. Straus answered:

However, solvent vapor is not a solid waste (see Section 1004(27) of the Solid Waste Disposal Act, as amended, where the term "solid waste" is defined to include, among other things, contained gaseous material). Since these solvent vapors are not contained, they are not defined as a solid or hazardous waste. Furthermore, when the solvent vapor is adsorbed onto activated carbon, it would not be covered by the listing or by the mixture rule. Rather, these wastes would only be hazardous if they exhibit any of the hazardous waste characteristics.

Therefore, a listed hazardous waste previously contained in a cylinder lost its hazardous waste status once removed from the cylinder because it was no longer considered a solid waste. The mixture and derived-from rules would no longer apply

to it even if the listed waste was absorbed onto the activated carbon and it would only be subjected to hazardous waste management if it met one of the hazardous waste characteristics. This document is Attachment D.

E. June 17, 1987, Regulatory Determination Letter from Matt Straus to Clifford Ng, (9441.1987(46)).

The fifth document is an interpretation letter from Matt Straus, Chief of the Waste Characterization Branch, to Clifford Ng, an Engineer at EPA Region 2. In his letter, Mr. Strauss answered questions relating to “waste streams associated with a specific methanol recovery process.” In response to the first waste stream, Mr. Straus states:

Stream A, the methanol-laden air from the drying and granulation step of the process, does not meet the definition of a solid waste under RCRA because it is in vapor form and not confined in a container.

This statement indicates that EPA does not consider gases in pipes solid wastes because they are not “contained.” This letter is included as Attachment E.

F. December 11, 1989, Rule Listing Chlorinated Aliphatics as Hazardous Waste.

The sixth document is a decision announced in the preamble to a listing rule. 54 Fed. Reg. 50,968 (December 11, 1989). In the proposed rule, EPA had stated it was going to list “light ends” generated from the manufacture of chlorinated aliphatic hydrocarbons as a hazardous waste. This waste was in a gaseous state. After receiving comments, EPA decided that such wastes were excluded from the statutory definition of solid waste stating,

Upon reconsideration of this issue (with the benefits of the comments received on the proposed rulemaking), EPA now believes our authority to identify or list a waste as hazardous under RCRA is limited to containerized or condensed gases (*i.e.*, section 1004(27) of RCRA excludes all other gases from the definition of solid wastes and thus cannot be considered hazardous wastes).

54 Fed. Reg. at 50,973/1. Thus, EPA explicitly tied its interpretation to the statutory definition of solid waste at issue in the Agency’s non-hazardous secondary materials rule. This rulemaking is included as Attachment F.

G. July 1990 Technical Guidance Document on RCRA Organic Emission Standards for Process Vent Equipment Leaks.

On June 21, 1990, EPA issued rules relating to organic air emission standards for process vent equipment leaks from RCRA facilities. 55 Fed. Reg. 25,454. In that

notice, EPA also announced that it had prepared a technical guidance document for assisting implementation of the rule. On page 2-3 of the technical guidance document, EPA wrote:

These standards require that incinerators burning hazardous waste be operated to achieve a destruction and removal efficiency (DRE) of at least 99.99 percent for those primary organic constituents listed in the facility permit. However, the process vent stream (*i.e.*, gases and vapors) from a hazardous waste management unit would not be classified as a hazardous waste. Noncontainerized gases emitted from hazardous wastes are not themselves hazardous waste because the RCRA statute specifically excludes them. Therefore, combustion of process vent streams in an incinerator is not subject to the 99.99 DRE requirement.

This document is included as Attachment G.

H. August 1991 Remand Order Issued By Administrator William K. Reilly.

The eighth document is an order from Administrator Reilly who was writing a decision in a permit appeal by BP Chemicals. Reilly, William K., EPA Administrator, "In the Matter of: BP Chemicals America Inc., Remand Order, RCRA Appeal No. 89-4, August, 1991. The issue in the case was whether EPA had the authority to regulate devices managing HCN vapors at BP's acrylonitrile manufacturing plant in Lima, Ohio. EPA Region 5 regulated these devices in a permit and BP appealed to the EPA Administrator. Administrator Reilly rejected the Region's claim of jurisdiction stating,

These authorities show that the Agency views gaseous material to be "solid waste" only when it is containerized. Region V argues that the BP's HCN vapor is "contained" by the various process units through which it passes, by associated piping, and by the plant as a whole. The Region's reading of the term "contained," however, cannot be reconciled with the Agency's treatment of fume incinerators. Such incinerators are used to treat vapors that are "contained" in the broad sense of being bound or controlled and not being emitted to the atmosphere, but the Agency considers such vapors to be outside the scope of the "solid waste" definition because they are not containerized in the narrower sense of being in an individual container such that the gas is amenable to shipment.

BP Order at 2. This indicates that EPA has specifically rejected the rationale put forth in the Agency's Response to Comments on the non-hazardous secondary materials identification rule, namely that the gaseous material being conveyed through pipes in a facility is "contained."

The Order also considers whether EPA Region V could regulate these vapors using the omnibus authority in RCRA § 3005(e). Concluding that it could not, Administrator Reilly stated: “the omnibus authority may not be used to override the exclusions (express or implied) from RCRA jurisdiction found in the definition of ‘solid waste.’ Otherwise, the exclusions would be rendered virtually meaningless, a result that would not produce a coherent and reasonable reading of the statute.” BP Order at 3. See Attachment H.

I. February 21, 1991, BIF Rule.

Finally, the last document is the final BIF rule promulgated at 56 Fed. Reg. 7,134 (Feb. 21, 1991). In the preamble to that rule, EPA explained that not all carbon regeneration units will be regulated because the wastes they are treating are not solid wastes. The Agency stated:

Activated carbon units used as air emissions control of gaseous industrial process emissions will not necessarily be regulated because trapped organics in such columns are not hazardous waste because the gas originally being treated is not a solid waste (it is an uncontained gas⁹²), and therefore any condensed organics do not derive from the treatment of a hazardous waste.”

56 Fed. Reg. at 7,200/2. The footnote reference is to the June 1982 rule and December 1989 rules discussed above. This document is included as Attachment I. (Note: footnote 92 erroneously labels the June 24, 1982, as being issued on June 30, 1982.)