

US EPA ARCHIVE DOCUMENT

DCN PH2A003

COMMENTS The Penta Task Force

RESPONDER JLABIOSA

SUBJECT WOOD5

SUBJNUM 003

COMMENT C. Option 2 -- CMBST With a 0.20 ng/DSCM MACT

Limit. The Penta Task Force believes that Option 2 -- CMBST with a 0.20 ng/DSCM TEQ MACT limit for dioxin/furan emissions -- is an impracticable treatment option. To the extent EPA has proposed Option 2 because of concerns that dioxins/furans can be reformed in the post-combustion zone as products of incomplete combustion ("PICs"), it is important to recognize that the problem of PIC formation is not limited to F032 (or even F024 waste) but rather is endemic to the combustion of all chlorinated organic waste. Combustion of F032 (or even F024) waste would contribute only marginally to the total volume of dioxins/furans emitted by all combustion sources. There thus would be little, if any, environmental benefit achieved by requiring combustion facilities to meet the proposed dioxin/furan emission limits as a prerequisite for treating F032 (or even F024) waste but not other chlorinated waste. The volumes of F032 (or even F024) waste, although sizeable, are unlikely to provide sufficient market incentives for combustion facility operators to agree to meet the proposed MACT standard in advance of their promulgation. Indeed, our discussions with various combustion facility operators indicate that they are unlikely to accept F032 waste under the terms offered by Option 2. The problem is not so much that many combustion units do not currently meet the limits; EPA's own analysis suggests that 50 percent of facilities for which the Agency has data currently meet the 20 ng/DSCM TEQ standard. 61 Fed. Reg. 17,358, 17,382 (Apr. 19, 1996). Rather the combustion facilities are unlikely to be willing to perform the analyses, maintain the records, and satisfy the other administrative requirements that would be necessary to certify compliance with the proposed MACT standard. Moreover, these facilities would not be expected to be willing to commit resources now to comply with a proposed standard that may change upon final promulgation. And given the cost of meeting the MACT standard for the remaining 50 percentile of facilities, which EPA has estimated at \$26.2 million (61 Fed. Reg. 17,382), there is no reasonable likelihood that these facilities will modify their operations now simply in order to be able to treat F032 (and perhaps F024) waste. In short, Option

2 does not address the principle problem with the proposed dioxin/furan treatment standard -- the lack of available treatment capacity for such waste and the exorbitant cost of treatment in those limited circumstances where the capacity does exist. Requiring advance compliance with the proposed MACT standard is unnecessary. For F032 waste, EPA has indicated that it will retain Universal Treatment Standard ("UTS") levels for all of the regulated non-dioxin/furan constituents as part of the overall treatment standard under either of the three options. 61 Fed. Reg. 21,420. These non-dioxin/furan concentration limits will provide sufficient assurance that combustion devices that treat F032 waste are well-operated and that the waste is appropriately treated. Moreover, the real difference between a CMBST standard, as provided by Option 1, and a CMBST plus a proposed MACT standard, as provided under Option 2, is essentially one of timing. The EPA rulemaking on the MACT standard has already reached the proposal stage and the public comment period is scheduled to close in August, 1996. See 61 Fed. Reg. 27,038 (May 30, 1996). The additional period of time needed to allow the MACT rulemaking to reach the final promulgation stage will be only a fraction of the six years that have lapsed since the Agency's listing of F032 waste as hazardous. There is thus no basis for believing that the public would be at risk if EPA were to permit F032 waste to be treated in CMBST units now and allow those units to meet a MACT standard in the normal course of that standard's promulgation. To the extent, however, that EPA is inclined to select Option 3 -- CMBST in a RCRA-permitted facility -- rather than a CMBST standard, we urge that EPA provide for treatment in combustion units that are either RCRA permitted or meet the MACT limit as ultimately promulgated. Once the MACT standard becomes final there would be no conceivable justification of depriving non-permitted combustion facilities of the opportunity of treating F032 waste, and providing that opportunity now as part of this rulemaking will obviate the need to modify the F032 standard once the final MACT is promulgated.

RESPONSE

After reviewing public comments, EPA concurs with the commenter that promulgation of regulatory performance requirements for combustion technologies treating D/F constituents in F032 and F024 will ultimately be addressed in the MACT rule and that finalizing the MACT standards at this time may impose an undue burden on the industry. EPA intends to finalize the

proposed MACT standards in April 1998. EPA believes further that until MACT standards are promulgated, existing standards will generally assure that the treatment of these wastes is conducted in well designed and well operated combustion devices.

DCN PH2A009

COMMENTS Commenter Dow Chemical

RESPONDER JLABIOSA

SUBJECT WOOD5

SUBJNUM 009

COMMENT Dow encourages EPA to consider continued improvement and refinement of the RCRA LDR program and also agrees with EPA's assessment that combustion technologies generally can treat a broad range of wastes and residues. Dow is further supportive of adopting technology standards where this makes sense, thus avoiding unneeded sampling and analytical work. However, Dow is extremely concerned with EPA's suggestion of imposing restrictions under LDR (Suboptions 2 and 3, 61 FR 21421) that deal with issues other than land disposal and which are currently regulated by other provisions of RCRA and/or equivalent authorized state programs. Dow strongly believes this is unprecedented within the LDR program and beyond its scope. Imposing air emissions limits or constraints based on permit status under LDR would establish tremendous new precedence for the remainder of the LDR standards which are based on some form of combustion. Ultimately by proposing Suboptions 2 or 3, EPA raises the question regarding the safety and effectiveness of treatment systems which are regulated under EPA's own programs and form the basis for much of its LDR program.

RESPONSE

The commenter is unclear about EPA's authority for setting additional regulatory controls that could establish how a treatment method technology standard ought to be implemented. Also, EPA is unclear on the comments emphasizing that EPA is setting a precedent with this rulemaking. The commenter is particularly concerned with EPA's proposal that the same regulatory controls proposed for F032 are also promulgated for F024.

EPA's authority to prescribe treatment limits or methods of treatment under the LDR are set under section 3004 (m) of HSWA. Under such HSWA provisions, EPA is directed to set treatment standards that would reduce short- and long-term threats to the human health and the environment. Such standards cannot allow cross-media transfer of hazardous constituents in excessive levels. *Chemical Waste Management v. EPA*, 976 F. 2d 2, 17 (D.C. Cir. 1992). EPA believes that the regulatory standards for combustion units satisfy this test (although the Agency is in the process of reevaluating those standards and amending them to reflect performance of MACT).

After reviewing public comments, EPA concurs with the commenter that promulgation of regulatory performance requirements for combustion technologies treating D/F constituents in F032 and F024 will ultimately be addressed in the MACT rule and that finalizing the MACT standards at this time may impose an undue burden on the industry. EPA intends to finalize the proposed MACT standards in April 1998. EPA believes further that until MACT standards are promulgated, existing standards will generally assure that the treatment of these wastes is conducted in well designed and well operated combustion devices.

Other commenters to the NODA presented persuasive comments that the combustion "CMBST" compliance treatment alternative is also available for F032 and F024 combusted in combustion units operating under interim standards of 40 CFR 266. EPA is persuaded that such units often meet more stringent standards than those imposed on 40 CFR 264 incinerators. EPA has also determined that ad hoc technological controls can be imposed, if needed, to ensure that the combustion of F032 and F024 in 40 CFR 266 units are conducted in a well designed and well operated combustion device. As a result, EPA has revised suboption 3 to expand the availability of the proposed combustion "CMBST" treatment compliance alternative to include those units regulated under either 40 CFR 266 or 264.

DCN PH2A009

COMMENTS DOW Chemical

RESPONDER JLABIOSA

SUBJECT WOOD5

SUBJNUM 009

COMMENT EPA does not address the apparent lack of any tetra-PCDF data related to F032. Additionally, the detection level is unreported for the F032 penta-PCDD, so the public has no meaningful information regarding the relative maximum concentrations of these two classes of compounds. Every class of compounds for which meaningful data was provided shows that the F032 contains higher concentrations of the compounds of concern. EPA's presentation of data seems slanted towards the conclusion to treat these wastes in an identical manner. However, the listings themselves and the data seem to support the conclusion that these are two very different waste streams that should be evaluated on an individual basis. Regardless of what is done with F032's LDR standards, EPA should not revisit its recent promulgation of F024 LDR standards. EPA's proposal to require combustion units burning certain LDR wastes to also meet specified stack emissions limits or permit constraints goes beyond the scope of LDR and is duplicative to other programs already well developed in RCRA. Both Suboptions two and three (61 FR 21421) propose conditions on treating either F032 and/or F024 that seek to address issues having nothing to do with the goals of LDR as described in the plain construction of the text of Section 3004(d), (e), (g) or (k) of RCRA and 40 CFR 268.1. Dow is unaware of this approach being used for any other BDAT determination in the LDR program and should EPA continue to pursue this approach, it calls into question all of its previous decision-making under LDR regarding BDAT determinations. Plainly, the goal of LDR is to address issues having to deal with the land disposal of RCRA wastes. Neither the ability of a unit to meet a certain stack emissions limit, nor that unit's permit status have anything to do with the unit's ability to meet LDR standards. ANY treatment unit managing RCRA wastes for which LDR standards have been issued, must assure that its residues meet applicable standards. EPA must maintain the focus of LDR on land disposal and avoid duplicating requirements under other provisions of RCRA or equivalent programs in authorized states and/or federal and state air programs. The emissions controls program for the hazardous waste combustion industry is

a mature program which has been operating in many states and regions for as many as 15 years. Almost all commercial and

captive operations in the U.S. have either been permitted under RCRA or an equivalent state authorized program or are operating under the self-implementing BIF regulations. These programs require important waste handling provisions, combustion unit operations controls and emissions limits. In addition, some units today already have dioxin emission limits and with the upcoming MACT regulations for all forms of hazardous waste burning devices, EPA's efforts to further improve the performance of this industry will be accomplished. Therefore, EPA does not need to establish a brand new component of the LDR program as suggested in Suboptions 2 and 3.

RESPONSE

The commenter expresses concern over EPA's proposal to apply the same regulatory controls on the combustion of F032 to F024 wastes. Specifically, the commenter objects to EPA's proposal that F024 and F032 are subject to the same combustion requirements.

The commenter believes that EPA should not reopen the existing CMBST standard applicable to F024. This is because the commenter believes that F024 is significantly different than F032. EPA acknowledges that these wastes differ on the concentration levels of specific hazardous homologues of D/F constituents and the type of D/F precursors both waste have. Nevertheless, both wastes are toxic wastes listed as hazardous wastes under the 40 CFR 261 and the combustion of these wastes is currently allowed in combustion devices that meet a four 9's Destruction Removal Efficiency performance. The Penta Task Force has asked EPA to adopt the same compliance treatment standard of combustion currently applicable to F024. Adoption of the CMBST would waive the monitoring of D/F constituents in F032 residues resulting from well designed and well operated combustion devices. EPA codified such treatment compliance alternative as incineration or "INCIN" in the 40 CFR 264 Subpart O unit (see Third Third rule (see 55 FR 22580-1, June 1, 1990)). EPA later amended the standard to a CMBST standard in the Phase 3 rulemaking.

EPA believes that the suggestion has merit, provided combustion occurs in devices that can assure destruction of these hazardous constituents. Units subject to standards establishing CO/HC standards, or specific controls for D/F, satisfy these criteria. As explained in the preamble, these are Part 264 incinerators and Part 266 BIFs, plus interim status incinerators that have demonstrated good combustion efficiency. [See, also, Final BDAT Background Document Wood Preserving Wastes for F032, F034, and F035 (April 15, 1997).] EPA is adding this standard in the final rule, and also amending the standard for F024 to conform to a CMBST standard that requires operation under Part 264 incinerators or Part 266 BIFs.

EPA's authority to prescribe treatment limits or methods of treatment under the LDR are set under section 3004 (m) of HSWA. Under such HSWA provisions, EPA is directed to set treatment standards that would reduce short- and long-term threats to the human health and the environment. In today's rule, EPA allows F032 to comply with either a numerical limit or with the use of a combustion device operated in accordance with Part 264, incinerators, or Part 266, Boilers and Industrial Furnaces (BIFs). EPA believes that by limiting the promulgated method of treatment, i.e., availability of the combustion ("CMBST") standard, to a Part 264 incinerator or 266 BIF, EPA can ensure that the combustion of D/F in F032 is conducted in a manner that is protective to the human health and the environment. EPA has promulgated similar kinds of technology standards for hazardous wastes regulated under Part 268.43 and hazardous debris under Part 268.45. These specific treatment standards under Parts 268.42 and 268.45 prescribe treatment methods and EPA has relied on permit authority, federal/state air emission standards, or promulgated operational technology performance requirements to ensure that the technology treatment methods are protective to the human health and the environment, and in particular do not result in the type of impermissible cross-media transfer of hazardous constituents referred to by the Chemical Waste Management court.

After reviewing public comments, EPA concurs with the commenter that promulgation of regulatory performance requirements for combustion technologies treating D/F constituents in F032 and F024 will ultimately be addressed in the MACT rule and that finalizing the MACT standards at this time may impose an undue burden on the industry. EPA intends to finalize the proposed MACT standards in April 1998. EPA believes further that until MACT standards are promulgated, existing standards will generally assure that the treatment of these wastes is conducted in well designed and well operated combustion devices.

Other commenters to the NODA presented persuasive comments that the combustion "CMBST" compliance treatment alternative is also available for F032 and F024 combusted in combustion units operating under interim standards of 40 CFR 266. EPA is persuaded that such units often meet more stringent standards than those imposed on 40 CFR 264, incinerators. EPA has also determined that combustion controls can be imposed, if needed, to ensure that the combustion of F032 and F024 in 40 CFR 266 units are conducted in a well designed and well operated combustion device. As a result, EPA has revised suboption 3 to expand the availability of the proposed combustion "CMBST" treatment compliance alternative to include those units regulated under either 40 CFR 266 or 264.

DCN PH2A009

COMMENTS DOW Chemical

RESPONDER JLABIOSA

SUBJECT WOOD5

SUBJNUM 009

COMMENT EPA's assumption that dioxin emissions and levels in combustion wastes will increase unless additional requirements are imposed (such as Suboptions 2 and 3) is flawed. EPA is concerned that by retaining the CMBST standard for F024 wastes there will be a sudden increase in D/F emissions and increased concentrations adsorbed onto combustion wastes. This assumption is flawed. F024 wastes have been incinerated in combustion units for many years. F032 must also be incinerated since the Penta Task Force is requesting CMBST as an alternative treatment method. (If this is not the case then EPA should review F032 wastes separately from F024 with respect to Suboption #2.) Dow does not agree that a simple CMBST standard could lead to increased air emissions of D/F when these wastes have been incinerated all along. If a facility decides to increase flow to these units or build a new combustion unit, as always, appropriate permits or modifications will have to be acquired. Dow is concerned that the database used for evaluating compliance with the D/F emission standard is not representative of all combustion units. Issue # 3 - EPA refers to a number of background documents for the claim that at least 50% of the facilities tested for the proposed combustion rule meet this MACT limit. This statement is very questionable considering the database upon which this assumption is based. This database will be commented on during the comment period for the proposed MACT combustion standard. Dow doubts that there is adequate representation of captive incinerators in this database since D/F data is not required to be generated. It is also very doubtful whether 50% of combustion units would meet the D/F limits set by the MACT standard without first installing control equipment. EPA must not revise F024's CMBST alternative standard to limit the combustion of F024 to combustion devices that have been permitted. Dow disagrees with EPA that combustion of F024 wastes should be limited to combustion units that have been issued a RCRA permit. Many commercial and non-commercial BIF in Texas and Louisiana are currently operating under interim status. The EPA Region 6 Combustion Strategy states that 55 commercial and non-commercial BIFs are currently operating under RCRA interim status, in fact no BIF unit in Region 6 has a RCRA permit at

this time. Some of these BIF units may manage F024 waste. If EPA were to require F024 wastes to be burned in permitted units, facilities may be forced to send this material to a limited number of permitted commercial incinerators (in some cases out-of-state). Incineration at a commercial unit would be very costly and wasteful of existing incineration capacity, and it is doubtful whether there would be enough capacity at the commercial facilities to handle this additional amount of material. Although many BIF units operate under interim status, these units are more stringently regulated than permitted RCRA incinerators. BIF facilities are required to meet very stringent emission limits and are required to conduct compliance burns every three years. In addition, monitoring and recordkeeping is more extensive than that required for permitted units. In addition to the interim status requirements, BIF units are required to have Clean Air Act permits which must take into account impacts on the surrounding community. Many hazardous waste incinerators have RCRA permits, however, very few have undergone the omnibus risk review that EPA is using as the rationale for limiting F024 wastes to permitted units. Given this fact, EPA's rationale for requiring F024 wastes to be incinerated at permitted units is seriously undermined. Realistically, permitted units that have not undergone the omnibus site-specific evaluation or risk assessment are no different than an interim status unit in evaluating of the necessity for more stringent permit conditions in order to protect human health and the environment. Dow believes that the current RCRA interim status BIF regulations and emission requirements are sufficient at this time to eliminate the need to require additional limitations to combustion of F024 wastes. In summary, EPA should neither change the F024 standard nor impose an interim D/F emission standard.

RESPONSE

EPA agrees with the commenter that all BIFs should be eligible for the alternative treatment standard, and further agrees that imposition of proposed MACT requirements for D/F is premature. However, EPA disagrees that interim status incinerators should automatically be eligible for the CMBST compliance alternative. These units are not subject to standards that assure good combustion efficiency, and it is EPA's view that eligibility for this alternative should be limited to combustion units at least capable of demonstrating such efficiency. Thus, the issue is not whether combustion units have gone through a site-specific risk assessment for D/F, but whether, if combustion facilities are not going to monitor ash to document compliance, whether

they are at least able to demonstrate operation with good combustion efficiency, either through compliance with regulatory standards like CO/HC, or through a specific demonstration.

The commenter expresses concern over EPA's proposal to apply the same regulatory controls on the combustion of F032 to F024 wastes. Specifically, the commenter objects to EPA's proposal that F024 and F032 are subject to the same combustion requirements.

The commenter believes that EPA should not reopen the existing CMBST standard applicable to F024. This is because the commenter believes that F024 is significantly different from F032. EPA acknowledges that these wastes differ on the concentration levels of specific hazardous homologues of D/F constituents and the type of D/F precursors both wastes have. Nevertheless, both wastes are toxic wastes listed under the 40 CFR 261 Part D and the combustion of these wastes is currently allowed in combustion devices that meet a four 9's Destruction Removal Efficiency performance. The Penta Task Force has asked EPA to adopt the same compliance treatment standard of combustion currently applicable to F024. Adoption of the CMBST would waive the monitoring of D/F constituents in F032 residues resulting from well designed and well operated combustion devices. EPA codified such treatment compliance alternative as incineration or "INCIN" in the 40 CFR 264 Subpart O unit (see Third Third rule (see 55 FR 22580-1, June 1, 1990)). EPA later amended the standard to a CMBST standard in the Phase 3 rulemaking.

EPA believes that the suggestion has merit, provided combustion occurs in devices that can assure destruction of these hazardous constituents. Units subject to standards establishing CO/HC standards, or specific controls for D/F, satisfy these criteria. As explained in the preamble, these are Part 264 incinerators and Part 266 BIFs, plus interim status incinerators that have demonstrated good combustion efficiency. [See, also, Final BDAT Background Document Wood Preserving Wastes for F032, F034, and F035 (April 15, 1997).] EPA is adding this standard in the final rule, and also amending the standard for F024 to conform to a CMBST standard that requires operation under Part 264 incinerators or Part 266 BIFs.

In today's rule, EPA allows F032 to comply with either a numerical limit or with the use of a combustion device operated in accordance with Part 264, incinerators, or Part 266, Boilers and Industrial Furnaces (BIFs). EPA believes that by limiting the promulgated method of treatment, i.e., availability of the combustion ("CMBST") standard, to a Part 264 incinerator or 266 BIF, EPA can ensure that the combustion of D/F in F032 is conducted in a manner that is protective to the human health and the environment.

EPA has promulgated similar kinds of technology standards for hazardous wastes regulated under Part 268.43 and hazardous debris under Part 268.45. These specific treatment standards under Parts 268.42 and 268.45 prescribe treatment methods and EPA has relied on permit authority, federal/state air emission standards, or promulgated operational technology performance requirements to ensure that the technology treatment methods are protective to the human health and the environment, and in particular do not result in the type of impermissible

cross-media transfer of hazardous constituents referred to by the Chemical Waste Management court.

After reviewing public comments, EPA concurs with the commenter that promulgation of regulatory performance requirements for combustion technologies treating D/F constituents in F032 and F024 will ultimately be addressed in the MACT rule and that finalizing the MACT standards at this time may be premature. EPA intends to finalize the proposed MACT standards in April 1998. EPA believes further that until MACT standards are promulgated, the promulgated CMBST treatment standard can assure that the treatment of these wastes is conducted in well designed and well operated combustion devices. In the interim, EPA is relying on Omnibus permit writer authorities to address potential concerns with regard to the implementation of this promulgated combustion compliance treatment alternative. EPA has withdrawn, therefore, the proposed suboption 2.

Contrary to the commenter's belief that a simple "CMBST" alternative treatment standard (i.e. this is adoption of suboption 1) is protective of the human health and the environment, EPA believes that some controls shall be imposed on the combustion of F032 and F024 if the facility wishes to avoid monitoring ash for compliance with D/F treatment standards. This is because these two waste in addition to containing some levels of D/F constituents in the untreated wastes, they contain precursors to the formation of D/F constituents (e.g. chlorinated organics). D/F can be formed as products of incomplete combustion, in the post-reaction flame zone of combustion devices, and under some predetermined air pollution control devices operating conditions (e.g. off gas reaction temperatures ranging from 400⁰ F to 750⁰ F or when keeping the inlet temperature of gases to fiber filters, electrostatic precipitators, or scrubbers below 400⁰ F in order to prevent D/F formation). Unlike the commenter, EPA believes that these kind of treatment performance uncertainties shall be minimized for combustion devices seeking compliance with the proposed treatment standard alternative of "CMBST" for these wastes. (EPA also notes that F024 and now F032 are the only treatment standards where the Agency is essentially allowing compliance with a numerical standard without a monitoring requirement, and so does not accept the implication of the comment (possibly unintended) that limitations on unit eligibility being promulgated in this treatment standard are inconsistent with other standards adopted by EPA.) EPA believes, further, that such uncertainties can be minimized by requiring combustion units seeking compliance with the combustion alternative to adopt good combustion practices, temperature controls, risk analyses, or other applicable operating conditions. EPA believes that current RCRA Omnibus permit authorities under the 40 CFR 264 Subpart O and the regulatory standards in 40 CFR 266 can be used to address these concerns and thus, to minimize such uncertainties. EPA believes, however, that such Omnibus permit authorities are some how limited to ensure that the combustion of F032 in combustion devices operated under the provisions of the 40 CFR 265 are conducted routinely in well designed and operated treatment units. EPA has withdrawn, therefore, the proposed suboption 1 and abolished the existing "CMBST " for F024.

Other commenters to the NODA presented persuasive comments regarding the merits for

allowing the availability of the F032 and F024 combustion treatment alternative to those units operating under 40 CFR 266. EPA is persuaded that such units often meet more stringent standards than those imposed on 40 CFR 264, incinerators. EPA has also determined that combustion controls can be imposed, if needed, to ensure that the combustion of F032 and F024 in 40 CFR 266 units are conducted in a well designed and well operated combustion device. As a result, EPA has revised suboption 3 to expand the availability of the proposed combustion "CMBST" treatment compliance alternative to include those units regulated under either 40 CFR 266 or 264. EPA is thus promulgating this revised suboption 3 - "CMBST" standard for F024 and F032.

DCN PH2A010
COMMENTS EDF
RESPONDER JLABIOSA
SUBJECT WOOD5
SUBJNUM 010

COMMENT The remaining discussion in this portion of the comments addresses the alternative three options assuming arguing the numeric dioxin limits are not finalized. Under the first option, the F024 "combustion" standard would apply to F032 as well. This option does not ensure protection of human health and the environment since EPA's data indicate many combustion devices are not designed and/or operated to minimize dioxin emissions at the present time. New combustion standards intended to correct this problem are not scheduled to become effective for four or five years. Under option 2, EPA would require the combustion device receiving F032 and F024 to meet the recently proposed dioxin emission standards of 0.20 ng/DSCF, and demonstrate compliance every 18 months. Under option 3, the facility must be permitted so that EPA could employ the RCRA Section 3005(c)(3) omnibus authority and consider additional emission limits necessary to protect human health and the environment. EDF urges the selection of both options 2 and 3. Both options are needed to ensure the dioxin emission limits are met, since compliance demonstrations during interim status are self-implementing. In addition, the omnibus authority remains an important vehicle for controlling PICs at a combustion facility, an essential consideration for chlorinated wastes. Finally, option 3 will provide an important incentive for combustion devices to obtain RCRA permits. The continued operation of combustion facilities in interim status is one of the longstanding embarrassments of the RCRA program.

RESPONSE

EPA's authority to prescribe treatment limits or methods of treatment under the LDR are set under section 3004 (m) of HSWA. In today's rule, EPA allows F032 to comply with either a numerical limit or with the use of a combustion device operated in accordance with Part 264, incinerators, or Part 266, Boilers and Industrial Furnaces (BIFs). EPA believes that by limiting the promulgated method of treatment, i.e., availability of the combustion ("CMBST") standard, to a Part 264 incinerator or 266 BIF, EPA can ensure that the combustion of D/F in F032 is conducted in a manner that is protective to the human health and the environment.

EPA has promulgated similar kinds of technology standards for hazardous wastes

regulated under Part 268.43 and hazardous debris under Part 268.45. These specific treatment standards under Parts 268.42 and 268.45 prescribe treatment methods and EPA has relied on permit authority, federal/state air emission standards, or promulgated operational technology performance requirements to ensure that the technology treatment methods are protective to the human health and the environment, and in particular do not result in the type of impermissible cross-media transfer of hazardous constituents referred to by the Chemical Waste Management court.

EPA believes that the combination of meeting numerical standards for all other constituents plus controls on good combustion (either through Part 264 incinerators or actually in the Part 266 standards) are adequate to assure destruction of D/F sufficient to meet the numerical treatment requirements under 3004(m). These standards are also sufficient to assure that the types of impermissible cross-media transfers referred to by the Chemical Waste Management case (976 F.2d at 17) will not occur.

After reviewing public comments, EPA was persuaded by an outgrowth of comments that emphasized that promulgation of MACT controls on combustion devices treating F032 and F024 will be premature and that EPA shall make such determination within the scheduled final MACT rule for incinerators and BIFs. EPA was persuaded further by comments that Part 264 incinerator and Part 266 BIF controls can assure the destruction of D/F in these wastes. (See Phase IV's Preamble on Wood Preserving Wastes and the Final BDAT Background Document for F032, F034, and F035 (April 15, 1997).

DCN PH2A011

COMMENTS Vinyl Institute

RESPONDER JLABISOA

SUBJECT WOOD5

SUBJNUM 011

COMMENT The Vinyl Institute does not support suboption 2, as it is unnecessary, duplicative and inappropriate. In particular, EPA's recently proposed Hazardous Waste Combustion Maximum Achievable Control Technology (MACT) standard will effectively address EPA's concerns related to the reformation of D/F in F024 wastes. Requiring facilities currently treating F024 wastes to meet D/F emission standards would be duplicative or potentially inconsistent with the MACT standard, potentially requiring facilities to install additional pollution control equipment or to discontinue incineration of F024 wastes, which could result in capacity problems given that it is unclear how many units will be able to meet this standard. Likewise, the Vinyl Institute does not support suboption 3 because limiting combustion of F024 and F032 wastes to RCRA-permitted incineration units could also cause many manufacturers to be required to cease incinerating F024 wastes and to ship these wastes off-site, which would also significantly increase the load to commercial RCRA-permitted incineration units, leading to severe capacity problems and increased risk to human health and the environment due to additional handling and transportation requirements. The Vinyl Institute urges EPA to adopt suboption 1, as it is the only suboption supported by the record. It also achieves regulatory and statutory goals and provides the necessary technological flexibility. We thank you in advance for your consideration of these comments.

RESPONSE

After reviewing public comments, EPA concurs with the commenter that promulgation of regulatory performance requirements for combustion technologies treating D/F constituents in F032 and F024 will ultimately be addressed in the MACT rule and that finalizing the MACT standards at this time may impose an undue burden on the industry. EPA intends to finalize the proposed MACT standards in April 1998. EPA believes further that until MACT standards are promulgated, combustion controls under Part 264, incinerators, and Part 266, BFIs, can be issued to assure that the treatment of these wastes is conducted in well designed and well operated combustion devices. existing standards will generally assure that the treatment of these wastes is conducted in well designed and well operated combustion devices.

Other commenters to the NODA presented persuasive comments that the combustion "CMBST" compliance treatment alternative is also available for F032 and F024 combusted in combustion units operating under interim standards of 266. EPA is persuaded that such units often meet more stringent standards than those imposed on 264, incinerators. EPA has also determined that combustion controls can be imposed, if needed, to ensure that the combustion of F032 and F024 in Part 266, BIFs are conducted in a well designed and well operated combustion device. As a result, EPA has revised suboption 3 to expand the availability of the proposed combustion "CMBST" treatment compliance alternative to include those units regulated under either 266 or 264. EPA believes that since the commenter was advocating for retaining the option that F024 wastes can be combusted in 266 units, the impact of this promulgated alternative may be minimum on the current management of F024.

DCN PH2A015
COMMENTS CKRC
RESPONDER JLABIOSA
SUBJECT WOOD5
SUBJNUM 015

COMMENT The Cement Kiln Recycling Coalition (CKRC) is a national trade association representing virtually all those cement companies involved in the use of waste-derived fuel in the cement manufacturing process as well as those companies involved in the collection, processing, managing, and marketing of such fuel. CKRC has twenty member companies representing over 100 facilities throughout the U.S. CKRC's members are regulated by the Resource Conservation and Recovery Act (RCRA) for burning such fuels in boilers and industrial furnaces (BIF rules), codified at 40 CFR part 266, Subpart H. While CKRC has several concerns regarding issues raised in the "Land Disposal Restrictions Phase IV Rule Notice of Data Availability (Issues Associated with Clean Water Act Treatment Equivalency, and Treatment Standards for Wood Preserving Wastes and Toxicity Characteristic metal Wastes)" (NDA), CKRC is most concerned with the Agency's overall effort to attach global combustion issues (currently in the proposal stage of another rulemaking process) which have broad policy implications to a notice of data availability specific to wood preserving wastes. CKRC is strongly opposed to this approach as it effectively circumvents the rulemaking process which enables affected parties to be informed clearly about the Agency's regulatory intentions, to adequately consider their impacts, and provide appropriate comment. Thus, CKRC urges the Agency to delete the broad policy issues from this very specific notice of data availability.

RESPONSE

EPA agrees with the commenter that the proposal to impose MACT standards on combustion devices treating F032 and F024 was premature and EPA has thus withdrawn such regulatory options in today's rulemaking. See preamble.

DCN PH2A015
COMMENTS CKRC
RESPONDER JLABIOSA
SUBJECT WOOD5
SUBJNUM 015

COMMENT Closing CKRC is strongly opposed to the Agency's effort to attach broad-reaching, global combustion issues to a notice of data availability specific to treatment of wood preserving wastes. Based on the inappropriate policy-development precedent such activity could set, and in the face of data to the contrary, CKRC urges the Agency to strike these global issues from the NDA.

RESPONSE

EPA agrees with much of the comment. It would be premature to base a regulatory standard in this rule on the proposed MACT standards. However, EPA does not view the narrow issue of whether a combustion device should be able to waive monitoring of combustion ash as 'global'. Rather, it is a narrow issue related to LDR compliance. The Agency's view is that eligibility should hinge on demonstrated ability to combust efficiently--a reasonable, and limited approach. Such demonstration can come from having received a permit, being subject to the BIF standards, or made a specific demonstration of such ability. See preamble.

DCN PH2A016

COMMENTS Dupont

RESPONDER JLABIOSA

SUBJECT WOOD5

SUBJNUM 016

COMMENT DuPont supports limiting the scope of the proposed treatment standard for F032 Wood Preserving Waste to treatment standards for F032 Wood Preserving Waste. EPA's proposed suboptions 2 and 3 for establishing F032 treatment standards would also revise F024's CMBST alternative standard and would effectively redefine the CMBST standard. Specifically, proposed suboptions 2 and 3 would impose dioxin stack controls and permitted status to limit which hazardous waste treatment units could combust F032 and F024 wastes, apparently due to concerns about emissions of chlorinated dioxins and furans. EPA's proposed Revised Standards for Hazardous Waste Combustors (61 FR 17358, April 19, 1996) address controls on dioxin and furan emissions from hazardous waste incinerators, cement kilns, and light-weight aggregate kilns. Regions and States are proceeding with permitting for interim status incinerators, boilers, and furnaces. Consideration of the appropriate stack controls on dioxins and furans is best left to the Agency and commenters in the context of the Revised Standards for Hazardous Waste Combustors rather than in a rule to set LDR treatment standards for wood preserving wastes. Imposition of stack controls or permitted status as a possible part of the CMBST treatment standard would be premature and could interfere with ongoing rulemaking and permitting efforts. Instead, the Agency should limit the scope of development of a treatment standard for F032 waste to only F032 wastes and should not revise the CMBST standard for other wastes.

RESPONSE

The commenter expresses concern over EPA's proposal to apply the same regulatory controls on the combustion of F032 to F024 wastes. Specifically, the commenter objects to EPA's proposal that F024 and F032 are subject to the same combustion requirements.

The commenter believes that EPA should not reopen the existing CMBST standard applicable to F024. This is because the commenter believes that F024 is significantly different to F032. EPA acknowledges that these wastes differ on the concentration levels of specific hazardous homologues of D/F constituents and the type of D/F precursors both waste have. Nevertheless, both wastes are toxic wastes listed under the 40 CFR 261 and the combustion of

these wastes is currently allowed in combustion devices that meet a four 9's Destruction Removal Efficiency performance. The Penta Task Force has asked EPA to adopt the same compliance treatment standard of combustion currently applicable to F024. Adoption of the CMBST would waive the monitoring of D/F constituents in F032 residues resulting from well designed and well operated combustion devices. EPA codified such treatment compliance alternative as incineration or "INCIN" in the 40 CFR 264 Subpart O unit (see Third Third rule (see 55 FR 22580-1, June 1, 1990)). EPA later amended the standard to a CMBST standard in the Phase 3 rulemaking.

EPA believes that the suggestion has merit, provided combustion occurs in devices that can assure destruction of these hazardous constituents. Units subject to standards establishing CO/HC standards, or specific controls for D/F, satisfy these criteria. As explained in the preamble, these are Part 264 incinerators and Part 266 BIFs, plus interim status incinerators that have demonstrated good combustion efficiency. [See, also, Final BDAT Background Document Wood Preserving Wastes for F032, F034, and F035 (April 15, 1997).] EPA is adding this standard in the final rule, and also amending the standard for F024 to conform to a CMBST standard that requires operation under Part 264 incinerators or Part 266 BIFs.

EPA's authority to prescribe treatment limits or methods of treatment under the LDR are set under section 3004 (m) of HSWA. Under such HSWA provisions, EPA is directed to set treatment standards that would reduce short- and long-term threats to the human health and the environment. In today's rule, EPA allows F032 to comply with either a numerical limit or with the use of a combustion device operated in accordance with Part 264, incinerators, or Part 266, Boilers and Industrial Furnaces (BIFs). EPA believes that by limiting the promulgated method of treatment, i.e., availability of the combustion ("CMBST") standard, to a Part 264 incinerator or 266 BIF, EPA can ensure that the combustion of D/F in F032 is conducted in a manner that is protective to the human health and the environment.

EPA has promulgated similar kinds of technology standards for hazardous wastes regulated under Part 268.43 and hazardous debris under Part 268.45. These specific treatment standards under Parts 268.42 and 268.45 prescribe treatment methods and EPA has relied on permit authority, federal/state air emission standards, or promulgated operational technology performance requirements to ensure that the technology treatment methods are protective to the human health and the environment, and in particular do not result in the type of impermissible cross-media transfer of hazardous constituents referred to by the Chemical Waste Management court.

After reviewing public comments, EPA concurs with the commenter that promulgation of regulatory performance requirements for combustion technologies treating D/F constituents in F032 and F024 will ultimately be addressed in the MACT rule and that finalizing the MACT standards at this time may be premature. EPA intends to finalize the proposed MACT standards in April 1998. EPA believes further that until MACT standards are promulgated, Part 264 incinerators and Part 266 BIF can assure that the treatment of these wastes is conducted in well

designed and well operated combustion devices. EPA has withdrawn, therefore, the proposed suboption 2.

Contrary to the commenter's belief that a simple "CMBST" alternative treatment standard (i.e. this is adoption of suboption 1) is protective of the human health and the environment, EPA believes that some controls shall be imposed on the combustion of F032 and F024 if the facility wishes to avoid monitoring ash for compliance with D/F treatment standards. This is because these two waste in addition to containing some levels of D/F constituents in the untreated wastes, they contain precursors to the formation of D/F constituents (e.g. chlorinated organics). D/F can be formed as products of incomplete combustion, in the post-reaction flame zone of combustion devices, and under some predetermined air pollution control devices operating conditions (e.g. off gas reaction temperatures ranging from 400⁰ F to 750⁰ F or when keeping the inlet temperature of gases to fiber filters, electrostatic precipitators, or scrubbers below 400⁰ F in order to prevent D/F formation). Unlike the commenter, EPA believes that these kind of treatment performance uncertainties shall be minimized for combustion devices seeking compliance with the proposed treatment standard alternative of "CMBST" for these wastes. (EPA also notes that F024 and now F032 are the only treatment standards where the Agency is essentially allowing compliance with a numerical standard without a monitoring requirement, and so does not accept the implication of the comment (possibly unintended) that limitations on unit eligibility being promulgated in this treatment standard are inconsistent with other standards adopted by EPA.) EPA believes, further, that such uncertainties can be minimized by requiring combustion units seeking compliance with the combustion alternative to adopt good combustion practices, temperature controls, risk analyses, or other applicable operating conditions. EPA believes that current RCRA Omnibus permit authorities under the 40 CFR 264 Subpart O and the regulatory standards in 40 CFR 266 can be used to address these concerns and thus, to minimize such uncertainties. EPA believes, however, that such Omnibus permit authorities are some how limited to ensure that the combustion of F032 in combustion devices operated under the provisions of the 40 CFR 265 are conducted routinely in well designed and operated treatment units. EPA has withdrawn, therefore, the proposed suboption 1 and abolished the existing "CMBST " for F024.

Other commenters to the NODA presented persuasive comments regarding the merits for allowing the availability of the F032 and F024 combustion treatment alternative to those units operating under 40 CFR 266. EPA is persuaded that such units often meet more stringent standards than those imposed on 40 CFR 264, incinerators. EPA has also determined that combustion controls can be imposed, if needed, to ensure that the combustion of F032 and F024 in 40 CFR 266 units are conducted in a well designed and well operated combustion device. As a result, EPA has revised suboption 3 to expand the availability of the proposed combustion "CMBST" treatment compliance alternative to include those units regulated under either 40 CFR 266 or 264. EPA believes that since the commenter was advocating for retaining the option that F024 wastes can be combusted in 266 units, the impact of this promulgated alternative may be minimum on the management of F024.

DCN PH2A018
COMMENTS Chemical Waste Management
RESPONDER JLABIOSA
SUBJECT WOOD5
SUBJNUM 018
COMMENT III. TREATMENT STANDARDS FOR F032 WOOD PRESERVING WASTES

The Agency requests comment on the establishment of treatment standards for F032. Specifically the Agency proposes an alternative treatment standard with three suboptions. The alternative treatment standard option would be based on INCIN as a specified technology. The suboptions would 1) allow CMBST as well as INCIN; 2) establish CMBST as a specified technology and require dioxin/furan (D/F) air emission limits as proposed by the incineration MACT; 3) allow F024 and F032 treatment in only permitted combustion units. CWM believes that the easiest approach to implement would be to establish INCIN or CMBST as the treatment standard for the D/F constituents in the F032 wastes. If F032 dioxins and furans are regulated in this manner then CWM incineration facilities will be much more likely to accept F032 waste streams than if specific D/F constituents are regulated individually. CWM does not believe that Suboption 2 should be adopted at this time. The Agency should address D/F air emissions under the proposed MACT rule for hazardous waste combustion devices. See 61 Fed. Reg. at 17,358 (April 19, 1996).

RESPONSE

EPA essentially agrees with the commenter, except that interim status incinerators should not be automatically eligible for this alternative unless they can demonstrate good combustion efficiency equivalent to what a permitted incinerator or a regulated BIF must achieve. See Phase IV's preamble or Wood Preserving Waste and Final BDAT Background Document for Wood Preserving Wastes F032, F034, and F035 (April 18, 1997).

DCN PH2A020

COMMENTS CONDEA

RESPONDER JLABIOSA

SUBJECT WOOD5

SUBJNUM 020

COMMENT CONDEA Vista Company urges EPA to adopt sub-option 1 for F032 wastes. This option maintains the current treatment standard of combustion (CMBST) for F024 waste. We are concerned that imposing a dioxin/furan emission standard on facilities otherwise capable of F024 waste destruction could limit or eliminate the disposal options in the immediate future. Long term, EPA has proposed a MACT standard for incinerators, boilers and industrial furnaces that will limit dioxins and furans. The implementation of that MACT standard should be sufficient to assure minimal dioxin and furan emissions from facilities treating F024 waste.

RESPONSE

The commenter expresses concern over EPA's proposal to apply the same regulatory controls on the combustion of F032 to F024 wastes. Specifically, the commenter objects to EPA's proposal that F024 and F032 are subject to the same combustion requirements.

The commenter believes that EPA should not reopen the existing CMBST standard applicable to F024. This is because the commenter believes that F024 is significantly different to F032. EPA acknowledges that these wastes differ on the concentration levels of specific hazardous homologues of D/F constituents and the type of D/F precursors both waste have. Nevertheless, both wastes are toxic wastes listed under the 40 CFR 261 Part D and the combustion of these wastes is currently allowed in combustion devices that meet a four 9's Destruction Removal Efficiency performance. The Penta Task Force has asked EPA to adopt the same compliance treatment standard of combustion currently applicable to F024. Adoption of the CMBST would waive the monitoring of D/F constituents in F032 residues resulting from well designed and well operated combustion devices. EPA codified such treatment compliance alternative as incineration or "INCIN" in the 40 CFR 264 Subpart O unit (see Third Third rule (see 55 FR 22580-1, June 1, 1990)). EPA later amended the standard to a CMBST standard in the Phase 3 rulemaking.

EPA believes that the suggestion has merit, provided combustion occurs in devices that can assure destruction of these hazardous constituents. Units subject to standards establishing CO/HC standards, or specific controls for D/F, satisfy these criteria. As explained in the preamble, these are Part 264 incinerators and Part 266 BIFs, plus interim status incinerators that have demonstrated good combustion efficiency. [See, also, Final BDAT Background Document Wood Preserving Wastes for F032, F034, and F035 (April 15, 1997).] EPA is adding this standard in the final rule, and also amending the standard for F024 to conform to a CMBST

standard that requires operation under Part 264 incinerators or Part 266 BIFs.

EPA's authority to prescribe treatment limits or methods of treatment under the LDR are set under section 3004 (m) of HSWA. Under such HSWA provisions, EPA is directed to set treatment standards that would reduce short- and long-term threats to the human health and the environment.

In today's rule, EPA allows F032 to comply with either a numerical limit or with the use of a combustion device operated in accordance with Part 264, incinerators, or Part 266, Boilers and Industrial Furnaces (BIFs). EPA believes that by limiting the promulgated method of treatment, i.e. availability of the combustion ("CMBST") standard, to a Part 264 incinerator or 266 BIF, EPA can ensure that the combustion of D/F in F032 is conducted in a manner that is protective to the human health and the environment.

EPA has promulgated similar kinds of technology standards for hazardous wastes regulated under Part 268.43 and hazardous debris under Part 268.45. These specific treatment standards under Parts 268.42 and 268.45 prescribe treatment methods and EPA has relied on permit authority, federal/state air emission standards, or promulgated operational technology performance requirements to ensure that the technology treatment methods are protective to the human health and the environment, and in particular do not result in the type of impermissible cross-media transfer of hazardous constituents referred to by the Chemical Waste Management court.

EPA recognizes that some facilities that operate Part 265 incinerators may attain equivalent combustion controls to those achieved by Part 264 incinerators or Part 266 BIFs and thus, should be allowed to comply with the CMBST treatment standard promulgated for F032. But EPA believes such determination should be made on site-specific cases pursuant to EPA's authorities under the 40 CFR Part 268.42 (b). EPA has provided guidance in today's rule preamble discussion for wood preserving wastes and the Final BDAT Background Document for Wood Preserving Wastes on how determinations for equivalent treatment under 268.42 (b) will be administered for facilities who believe their Part 265 incinerators meet the combustion performance and controls attained by Part 264 incinerator or a Part 266 BIFs devices.

After reviewing public comments, EPA concurs with the commenter that promulgation of regulatory performance requirements for combustion technologies treating D/F constituents in F032 and F024 will ultimately be addressed in the MACT rule and that finalizing the MACT standards at this time may impose an undue burden on the industry. EPA intends to finalize the proposed MACT standards in April 1998. EPA believes further that until MACT standards are promulgated, combustion controls can be imposed, if needed, to ensure that the treatment of these wastes is conducted in well designed and well operated combustion devices.

Contrary to the commenter's belief that a simple "CMBST" alternative treatment standard

(i.e. this is adoption of suboption 1) is protective of the human health and the environment, EPA believes that some controls shall be imposed on the combustion of F032 and F024 if the facility wishes to avoid monitoring ash for compliance with D/F treatment standards. This is because these two waste in addition to containing some levels of D/F constituents in the untreated wastes, they contain precursors to the formation of D/F constituents (e.g. chlorinated organics). D/F can be formed as products of incomplete combustion, in the post-reaction flame zone of combustion devices, and under some predetermined air pollution control devices operating conditions (e.g. off gas reaction temperatures ranging from 400⁰ F to 750⁰ F or when keeping the inlet temperature of gases to fiber filters, electrostatic precipitators, or scrubbers below 400⁰ F in order to prevent D/F formation). Unlike the commenter, EPA believes that these kind of treatment performance uncertainties shall be minimized for combustion devices seeking compliance with the proposed treatment standard alternative of "CMBST" for these wastes. (EPA also notes that F024 and now F032 are the only treatment standards where the Agency is essentially allowing compliance with a numerical standard without a monitoring requirement, and so does not accept the implication of the comment (possibly unintended) that limitations on unit eligibility being promulgated in this treatment standard are inconsistent with other standards adopted by EPA.) EPA believes, further, that such uncertainties can be minimized by requiring combustion units seeking compliance with the combustion alternative to adopt good combustion practices, temperature controls, risk analyses, or other applicable operating conditions. EPA believes that current RCRA Omnibus permit authorities under the 40 CFR 264 Subpart O and the regulatory standards in 40 CFR 266 can be used to address these concerns and thus, to minimize such uncertainties. EPA believes, however, that such Omnibus permit authorities are some how limited to ensure that the combustion of F032 in combustion devices operated under the provisions of the 40 CFR 265 are conducted routinely in well designed and operated treatment units. EPA has withdrawn, therefore, the proposed suboption 1 and abolished the existing "CMBST " for F024.

Other commenters to the NODA presented persuasive comments regarding the merits for allowing the availability of the F032 and F024 combustion treatment alternative to those units operating under 266. EPA is persuaded that such units often meet more stringent standards than those imposed on 264, incinerators. EPA has also determined that combustion controls can be imposed, if needed, to ensure that the combustion of F032 and F024 in 40 CFR 266 units are conducted in a well designed and well operated combustion device. As a result, EPA has revised suboption 3 to expand the availability of the proposed combustion "CMBST" treatment compliance alternative to include those units regulated under either 40 CFR 266 or 264. EPA believes that since the commenter was advocating for retaining the option that F024 wastes can be combusted in 266 units, the impact of this promulgated alternative may be minimum on the management of F024.