

US EPA ARCHIVE DOCUMENT

DCN PH2A003

COMMENTS The Penta Task Force

RESPONDER JLABIOSA

SUBJECT WOOD1

SUBJNUM 003

COMMENTS The Penta Task Force strongly supports the proposal to set a technology-based standard for F032 waste as an alternative to a treatment standard based on numerical dioxin/furan limits. As explained in our comments on the August, 1995 Phase IV LDR proposal, numerical limits for dioxin and furan constituents of F032 waste will raise treatment costs to prohibitive levels, will foreclose the only practicable avenue for treatment -- thermal treatment in combustion units that are subject to subtitle C standards, and is inconsistent with EPA's past regulation of other similar chlorinated waste that contain dioxins and furans (i.e., F024 waste). See Comments of the Penta Task Force on EPA's Proposal To Set Treatment Standards Under the Land Disposal Restrictions ("LDR") Program for Chlorophenolic Wastes from Wood Preserving Operations (November 20, 1995) (hereinafter "Penta Task Force November 20, 1995 Comments"). Of the three options offered in the Notice, the Penta Task Force strongly favors Option 1 -- a CMBST standard -- because it provides a substantial number of facilities that could manage F032 waste in an environmentally-sound manner. The Penta Task Force also recognizes that Option 3, which provides for combustion in RCRA- permitted facilities, would provide some increase in the number of combustion facilities that would accept F032 wastes and, thus, is far preferable to the proposed dioxin/furan limits. We do not believe that Option 2, which would require combustion facilities to certify compliance with the proposed Maximum Achievable Control Technologies ("MACT") dioxin/furan emission standard of 0.2 ng/DSCM TEQ in advance of its final promulgation, is practicable. And finally, the Penta Task Force does not believe that any change to the existing F024 treatment standard is warranted. Indeed, selection of Option 1 -- a CMBST standard -- would subject both F032 and F024 waste to the same standard and has the advantage of requiring no revision to the F024 standard. Our specific comments on each of the proposed alternative treatment options for F032 waste are set forth below.

1. TREATMENT OPTIONS A. Option 1 -- CMBST Standard. Option 1 would allow combustion ("CMBST") of F032 waste in high temperature organic destruction technologies, such as combustion in incinerators, boilers, or industrial furnaces operated in

accordance with applicable RCRA requirements. See 40 C.F.R. 268.42 (Table 1). The CMBST standard is listed as a treatment standard for numerous hazardous waste codes, and reflects EPA's recognition that combustion technologies generally are capable of effectively treating complex organic waste streams. The CMBST standard also is permitted for the treatment of a number of chlorinated organic wastes classified as "toxic" under RCRA, and thus is fully appropriate for F032 waste which shares the same classification under RCRA. In short, a CMBST standard for F032 waste would allow the waste to be treated in a variety of combustion practices without compromising health or the environment.

B. Option 3 -- CMBST In RCRA-Permitted Devices.

The Penta Task Force recognizes that Option 3, which provides for combustion in RCRA-permitted facilities, would increase the number of combustion facilities that would accept F032 waste and, thus, is by far preferable to the proposed dioxin/furan treatment standard. Option 3 also would fully satisfy the LDR criteria as an appropriate treatment standard. Indeed, EPA's August, 1995 proposal was predicated on the finding that incineration is the best demonstrated available treatment ("BDAT") for dioxins/furans in F032 waste. And EPA has oft-stated that various types of incineration have been demonstrated to treat high and low level dioxin/furan constituents in a variety of organic wastes to levels below detection limits in incineration residues. Option 3 thus would ensure that F032 waste is treated by BDAT technology without the attendant stigma and capacity shortfall problems that would result from setting dioxin/furan numerical limits in the treatment residue. Although Option 3 is preferable to setting dioxin/furan numerical limits, we do not believe there is a regulatory justification for limiting the treatment standard to permitted combustion devices only. As recently as April, 1996, EPA has amended the treatment standards for the various waste codes that were previously subject to an incineration (INCIN) standard to allow combustion in all hazardous waste incinerators, boilers and industrial furnaces under the new treatment code CMBST. See 61 Fed. Reg. 15,566, 15,601-15,653 (April 8, 1996). EPA has offered no justification for retreating from that decision now in the case of F032 (and perhaps F024) wastes. Under either option -- Option 1 or Option 3 -- the number of treatment facilities that would accept F032 wastes would be greatly expanded. The Penta Task Force believes that all options being considered by the Agency are fully protective

of health and safety and, thus, consideration of practicability and cost should drive the selection of the appropriate treatment option.

[Note: Text has been cut and appears in other codes.]

In sum, the Penta Task Force strongly supports the proposal to set an alternative technology-based standard for F032 waste. We favor Option 1 -- the CMBST standard -- but recognize that Option 3 -- CMBST in RCRA-permitted facilities -- will increase the number of combustion facilities that will accept F032 wastes. We believe that Option 2 -- CMBST with a proposed MACT dioxin/furan emission standard is impracticable. If the Agency is inclined to reject Option 1, then it should adopt a modified standard based on both Options 2 and 3 -- a standard that would allow treatment in combustion units that are either RCRA-permitted or that comply with the final MACT standard as promulgated in order to ensure that combustion units other than those that are RCRA-permitted will be able to accept F032 waste once the final MACT is promulgated.

RESPONSE

F032 and F024 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 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 for Wood Preserving Wastes F032, F034, and F035, April 15, 1997.) EPA is adding this standard in the final rule, and also is amending the standard for F024 to conform to a CMBST standard that requires operation under Part 264 incineration 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.

The Agency acknowledges that ensuring the combustion device operates under good combustion conditions (i.e., either under a DRE standard or by limiting CO/HC levels in stack gas) may not necessarily ensure control of PCDD and PCDF emissions. However, under existing omnibus permit authority, permit writers can prescribe on a case-by-case basis, operating requirements that can ensure appropriate combustion performance for the treatment of hazardous wastes (See 40 CFR 264.345(a) and 266.102(e)(2)). This authority has been invoked frequently to justify controls on permitted hazardous waste incinerators which controls are more stringent than those explicitly authorized by the regulations in 40 CFR Part 264 Subpart O. EPA believes that these authorities can be used to minimize threats to the human health and the environment that may arise from the combustion of F032 and F024.

EPA agrees with that well designed and well operated interim units operated under 266 qualify for the proposed alternative CMBST compliance standard. Virtually all hazardous waste incinerators have already been issued RCRA permits and thus have demonstrated compliance with the DRE performance standard that ensures destruction of toxic organics in the waste feed. In addition, RCRA regulated boilers and industrial furnaces are subject to substantive interim status combustion controls that limit CO/HC levels in combustion gases, ensuring that the devices operate under good combustion conditions, and can include explicit control of PCDD and PCDF under specified conditions (see section 266.103(c)(1)).

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 ad hoc technological controls can be imposed, if needed, to ensure that the combustion of F032 and F024 in 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 266 or 264.

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, ad hoc technological controls can be issued to ensure that the treatment of these wastes is conducted in well designed and well operated combustion devices. In the interim, EPA is relying on RCRA 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. In addition, EPA believes 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.

DCN PH2A003

COMMENTS The Penta Task Force

RESPONDER JLABIOSA

SUBJECT WOOD1

SUBJNUM 003

COMMENT The Notice of Data Availability seeks comment on, among other things, three options that are being considered by EPA as alternative treatment standards for pentachlorophenol ("penta") wood preserving waste ("F032 waste"). The three options are: (1) a "CMBST" treatment standard, (2) a CMBST treatment standard for combustion units that achieve dioxin/furan emission limits of 0.20 ng/DSCM TEQ, and (3) a CMBST treatment standard for combustion devices that are permitted under subtitle C of the Resource Conservation and Recovery Act ("RCRA"). The Notice also advises that a change in the proposed treatment standard for F032 waste may dictate changes in the F024 (a group of chlorinated aliphatic wastes) treatment standard.

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. EPA believes that the issue is in fact the same: can compliance with a D/F standard be assured without monitoring residues. EPA believes that the answer is yes for a common class of combustion devices. EPA does not see any basis for a finding that an interim status incinerator can assure destruction for either type of waste, absent at least a showing of good combustion conditions by such a unit. 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. Today, EPA is adding this standard in the final rule, and also is amending the standard for F024 to conform to a CMBST standard that requires operation under Part 264 incineration 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. EPA believes that Omnibus permit authorities under RCRA and other available environmental federal/state laws can be used to support the establishment of 3004(m) treatment standards and thus, to prescribed appropriate technological controls on treatment methods prescribed for these wastes. EPA has promulgated specific performance standards for the operation of incinerators combusting certain acutely toxic wastes that contain D/F constituents (see 40 CFR 264.343 (a) (2) and 50 FR 2005, January 14, 1985). EPA has promulgated similar kinds of technology treatment standards for hazardous wastes regulated under §268.42 and hazardous debris §268.46. These specific treatment standards under §§268.42 and 268.46 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 of the human health and the environment.

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, ad hoc technological controls can be issued to ensure that the treatment of these wastes is conducted in well designed and well operated combustion devices. In the interim, EPA is relying on RCRA 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. In addition, EPA believes 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.

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. EPA believes that since the commenter is burning F024 in 40 CFR 266 units the impact of this promulgated alternative will be minimum on the management of F024. 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 for Wood Preserving Wastes F032, F034, and F035, April 15, 1997.)

DCN PH2A009

COMMENTS Commenter Dow Chemical

RESPONDER JLABIOSA

SUBJECT WOOD1

SUBJNUM 009

COMMENT Dow supports EPA's earlier decision regarding BDAT F024 and believes this kind of approach can be adopted for other waste codes such as F032 as proposed in Suboption 1. Dow supports the application of the existing F024 alternative combustion treatment standards to F032 even though these wastes are different. These alternative combustion standards have been established as BDAT for F024 and therefore are protective of human health and the environment under LDR. Dow agrees with EPA's determination that combustion is a robust technology and is capable of handling a wide variety of waste, therefore, if EPA determines that the CMBST standard is protective of human health and the environment when applied to the significantly different F032 wastes, then the alternative combustion standards should be established for F032.

RESPONSE

The commenter expresses concern with 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. 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 for Wood Preserving Wastes F032, F034, and F035, April 15, 1997.) Nevertheless, both wastes are toxic wastes listed under the 40 CFR 261 Part D and the combustion 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 is adding this

standard in the final rule, and also is amending the standard for F024 to conform to a CMBST standard that requires operation under Part 264 incineration 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. EPA believes that Omnibus permit authorities under RCRA and other available environmental federal/state laws can be used to support the establishment of 3004(m) treatment standards and thus, to prescribed appropriate technological controls on treatment methods prescribed for these wastes. EPA has promulgated specific performance standards for the operation of incinerators combusting certain acutely toxic wastes that contain D/F constituents (see 40 CFR 264.343 (a) (2) and 50 FR 2005, January 14, 1985). EPA has promulgated similar kinds of technology treatment standards for hazardous wastes regulated under 268.42 and hazardous debris 268.46. These specific treatment standards under 268.42 and 268.46 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 of the human health and the environment.

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 ad hoc technological controls can be imposed, if needed, to ensure that the combustion of F032 and F024 in 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 266 or 264. EPA believes that since the commenter is burning F024 in 266 units the impact of this promulgated alternative will be minimum on the management of F024.

DCN PH2A011

COMMENTS Vinyl Institute

RESPONDER JLABISOA

SUBJECT WOOD1

SUBJNUM 011

COMMENT In the May 10 notice, EPA requested comment on a new option for treating F032 under which incineration would be set as the treatment method for dioxin/furan (D/F) concentrations. D/F concentrations would not need to be measured in the treated residues. EPA also outlined three suboptions, summarized as follows: Suboption 1: Apply the existing F024 alternative combustion treatment standard (CMBST) to F032. Suboption 2: Establish F032's and revise F024's CMBST alternative standard to require the combustion unit to achieve a dioxin emission standard. Suboption 3: Revise F024's CMBST alternative standard (and set F032's standard) to limit the combustion of F024 and F032 to combustion devices that have been permitted. For the reasons discussed below, the Vinyl Institute opposes suboptions 2 and 3, but would support suboption 1. In prior rulemakings, in which it applied its criteria for identifying hazardous wastes under RCRA, the Agency listed the F024 and F032 waste streams as different waste streams from non-specific sources. To now apply the same treatment standard to different waste streams, the Agency must more fully develop the rulemaking record. To proceed otherwise would be arbitrary and capricious. F024 and F032 are fundamentally chemically different wastes. As pointed out by the Agency in the notice, although the Agency has not fully reviewed data appearing in a characterization study by Vulcan Chemical, which was attached to the Penta Task Force's comment on the original proposal, the Agency indicated in the notice that the data "do not appear to support a determination that F032 and F024 are exactly alike." The notice further indicates that D/F concentrations in F024 and F032 vary by as much as two orders of magnitude. In short, the listings for F024 and F032 at 40 C.F.R. Part 261 and the data submitted by Vulcan reasonably support the conclusion that these chemically dissimilar streams should be evaluated independently by EPA under RCRA and may not necessarily require the same treatment standards. Even though the wastes are significantly chemically different, the Vinyl Institute would support suboption 1, i.e., applying the existing F024 alternative combustion treatment standards to F032. Over the years, combustion has proven to be effective in protecting human health and the environment. As

EPA indicates, it believes that "well-operated and well-designed combustion units can meet the treatment standard for F024 and F032." In addition, unlike suboptions 2 and 3, with suboption 1, facilities and regulators alike will find that determining compliance is more straightforward and that it provides the widest array of technology to effectively treat hazardous waste streams from different sources.

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. 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 for Wood Preserving Wastes F032, F034, and F035, April 15, 1997.) EPA is adding this standard in the final rule, and also is amending the standard for F024 to conform to a CMBST standard that requires operation under Part 264 incineration or Part 266 BIFs.

Nevertheless, both wastes are toxic wastes listed under the 40 CFR 261 Part D and the combustion 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'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. EPA believes that Omnibus permit authorities under RCRA and other available environmental federal/state laws can be used to support the establishment of 3004(m) treatment standards and thus, to prescribed appropriate technological controls on treatment methods

prescribed for these wastes. EPA has promulgated specific performance standards for the operation of incinerators combusting certain acutely toxic wastes that contain D/F constituents (see 40 CFR 264.343 (a) (2) and 50 FR 2005, January 14, 1985). EPA has promulgated similar kinds of technology treatment standards for hazardous wastes regulated under 40 CFR 268.42 and hazardous debris 40 CFR 268.46. These specific treatment standards under §§268.42 and 268.46 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 of the human health and the environment.

DCN PH2A012

COMMENTS Beazer

RESPONDER JL

SUBJECT WOOD1

SUBJNUM 012

COMMENT Although Beazer does not endorse any of the three suboptions proposed, Beaker believes that the first suboption would provide the most flexibility to the regulated community and would best serve to contain costs for such treatment. This option has been successfully used for F024 wastes and should be expanded to include F032 wastes. Beaker believes that adoption of either the second or third suboptions would be inconsistent with the Agency's goals in setting the alternative treatment standard. These suboptions both would require additional control equipment and/or permitting before a facility could accept F032 wastes. As such, we believe that commercial availability will be limited to a smaller universe of incineration and combustion facilities and consequently, there would be a potential for increased costs with no increased environmental benefit. In conclusion, Beaker supports the establishment of the alternative treatment standard, as modified by suboption 1 for F032 wastes. Notwithstanding this position, it is important to note that while the incineration/combustion treatment standard may relieve some of the burden on the regulated community to meet the concentration-based standards, it does not completely solve the waste disposal problem. Although, the use of incineration and combustion for limited volumes of process waste streams may be possible under the proposed rule, incineration will never be cost-effective for large volumes of wastes, especially remediation wastes. As stated in our previous comments, Beaker disagrees with EPA's capacity estimates insofar as those estimates do not account for the approximate 85.3 MM tons of soil impacted by previous wood treating operations which may require treatment under the proposed Phase IV LDRs. Based on the existing incineration capacity to date, it would take over 200 years to treat this quantity of material. Moreover, most incinerators cannot manage large volumes of impacted media. Although, in theory, the combustion alternative may broaden the scope of available facilities, in practice, it remains to be seen whether those facilities will be able to accept the types of wastes generated at remediation sites.

RESPONSE

EPA is promulgating treatment standards that set numerical limits for the regulation of Dioxin and Furan (D/F) hazardous constituents in F032. In response to comments from the Penta Task Force and the American Wood Preserving Institute, the EPA has also proposed and is promulgating in today's rule an alternative compliance treatment standard that sets combustion ("CMBST") as a treatment method for D/F constituents in F032.

EPA notes that the adopted approach allows flexibility for complying with the treatment requirements applicable to soils contaminated with F032 wastes. EPA has also identified energy/chemical intensive treatment alternatives in the Final BDAT Background Document that can enable remediation soils/wastes to meet the UTS limits promulgated today. EPA also believes that soils/media contaminated with F032 that are difficult to treat or for which EPA may determine the treatment standards are inappropriate can seek alternative treatment standards pursuant to 40 CFR Part 268.44(h). In addition, other potential waivers or variances are explained in the Final BDAT Background Document for Wood Preserving Wastes (F032, F034, and F035).

DCN PH2A012

COMMENTS Beazer

RESPONDER JLABIOSA

SUBJECT WOOD1

SUBJNUM 012

COMMENT In response to these and other comments asking EPA to consider alternatives to setting dioxin/furan concentration limits in the final rule, EPA is now considering an alternative option that would provide what it believes is additional flexibility to F032 generators. The new option would establish an alternative treatment standard that sets incineration/combustion as a treatment method for dioxin/furan constituents in lieu of meeting the proposed concentration-based standards. The concentration-based standards for other organic constituents in F032, however, would still be required to be achieved. 61 Fed. Reg. 21420.

RESPONSE

EPA is promulgating treatment standards that set numerical limits for the regulation of Dioxin and Furan (D/F) hazardous constituents in F032. In response to comments from the Penta Task Force and the American Wood Preserving Institute, the EPA has also proposed and is promulgating in today's rule an alternative compliance treatment standard that sets combustion ("CMBST") as a treatment method for D/F constituents in F032.

EPA has promulgated, however, a revised "CMBST" compliance alternative which limits the availability of the "CMBST" to those combustion devices in compliance with applicable combustion standards in the 40 CFR 264, Subpart O, or 266. F032 wastes combusted in combustion devices operating under 266 or 264 do not have to monitor the concentrations of D/F left behind in combustion residues. However, the facilities must meet UTS numerical limits applicable to each organic and metal constituent regulated in F032 as a prerequisite to land disposal.

It should be emphasized that facilities seeking the combustion of F032 in an incinerator regulated under a 265 Subpart O do not qualify for a "CMBST" treatment standard. F032 residues arising from 265 units must meet the applicable UTS numerical limits for each regulated D/F constituent as a prerequisite to land disposal.

DCN PH2A015
COMMENTS CKRC
RESPONDER JLABIOSA
SUBJECT WOOD1
SUBJNUM 015

COMMENT Option 1-- CMBST Treatment Standard This option of the NODA requests comment on applying the existing FO24 alternative combustion treatment standard to FO32. In its April 8, 1996 Land Disposal Restrictions Phase III Final Rule, EPA modified the treatment standard expressed as INCIN, which specified hazardous waste incineration, to CMBST, which allows combustion in incinerators, boilers and industrial furnaces. This modification confirms that, regardless of the technology, a well-operated combustion unit complying with either the BIF interim status or incinerator regulations can manage RCRA hazardous wastes in a manner protective of human health and the environment. This supports EPA's stated belief in the NODA that "well-operated and well-designed combustion units can meet the treatment standard for FO24 and FO32." This is the only option within the proposal that is consistent with Agency policy determinations in promulgated rule makings. Thus, it is the only option which the Agency requests comment that relies upon information which has been subject to full public notice and comment; and it appears to be the only option presented with a sound enough basis to be justified as an alternative combustion treatment standard for F032 wastes.

RESPONSE

The commenter has submitted comments on each regulatory suboptions EPA proposed to assure compliance with an alternative treatment standard of combustion ---"CMBST"--- . Adoption of the "CMBST" standard will allow the disposal of F032 without the need for monitoring the concentrations of D/F constituents in the treated F032 wastes. The commenter urges EPA to withdraw suboptions 2 and 3, and to promulgate, suboption 1. In addition, the commenter submitted extensive comments and studies which the commenter believes may lead EPA to conclude that the proposed suboption 2 (i.e., the proposed MACT air emission limit for D/F) is flawed.

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. EPA believes that Omnibus permit authorities under RCRA and other available environmental federal/state laws can be used to support the establishment of 3004(m) treatment

standards and thus, to prescribed appropriate technological controls on treatment methods prescribed for these wastes. EPA has promulgated specific performance standards for the operation of incinerators combusting certain acutely toxic wastes that contain D/F constituents (see 40 CFR 264.343 (a) (2) and 50 FR 2005, January 14, 1985). EPA has promulgated similar kinds of technology treatment standards for hazardous wastes regulated under 268.42 and hazardous debris 268.46. These specific treatment standards under 268.42 and 268.46 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 of the human health and the environment.

Like other commenters, this commenter has presented persuasive and factual 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. The 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 PH2A015

COMMENTS CKRC

RESPONDER JLABIOSA

SUBJECT WOOD1

SUBJNUM 015

COMMENT Option 3 -- CMBST Treatment Standard for Combustion Devices that are Permitted Under Subtitle C of RCRA EPA suggests in suboption 3 that an alternative in which it would limit land ban treatment of F024 and F032 wastes to combustion units that have received a RCRA permit, as opposed to those that are operating under interim status. The Agency appears to unjustly assume that all permitted units -- through use of the RCRA section 3005(a)(3) "omnibus" authority in the permitting process -- have been subjected to dioxin/furan limitations that are sufficiently stringent to address EPA's purported concerns. We submit that this approach is wholly illogical and clearly is unsupported by the record before EPA. First, it assumes that after use of omnibus authority, the standards imposed on commercial incinerators through RCRA permits are uniformly more stringent than interim status standards on BIFs. CKRC's Petition for Rulemaking of January 18, 1994 (attachment 3) most clearly demonstrates just the opposite to be true. Current EPA rules and policies impose more stringent requirements on cement kilns than on incinerators. A cursory comparison of the currently effective Boiler and Industrial Furnace (BIF) rules and the incinerator rules shows that cement kilns are subject to more extensive requirements; most notably, D/F specific regulatory language, and the emission standards for ten toxic metals in the BIF rules that are lacking in the incinerator rules. Virtually all of the BIF rule requirements apply during interim status and are fully enforceable during interim status. EPA has on at least two recent occasions confirmed this fact. In an October 1995 EPA Region VII Fact Sheet (attachment 4) distributed at a public hearing, EPA states that "Federal regulations that apply to air emissions from cement plants burning hazardous waste are newer and more comprehensive than the regulations for hazardous waste incinerators." Also, in the Agency's May 30, 1996 letter to Tom Blank of the Association for Responsible Thermal Treatment (ARTT) (attachment 5) Mike Shapiro, Director of the Office of Solid Waste, writes that "the cement kiln standards provided by the Boiler and Industrial Furnace rule are, in fact, more stringent than the Subpart O, Part 264, incinerator standards in that they establish risk-based emission limits for individual

metals, hydrogen chloride, and chlorine, in addition to the same DRE and particulate matter standards that apply to incinerators." In addition, site-specific risk assessments on BIF-regulated cement kilns confirm the effectiveness of the BIF regulations to limit emissions from these facilities at levels that are protective of human health and the environment. The Texas Natural Resources Conservation Commission (TNRCC) (attachment 6) and EPA Region VI (attachment 7) recently completed risk assessment studies on a cement kiln engaged in energy recovery in compliance with the BIF rule. These studies concluded that the risks posed by operation of the cement kiln burning waste-derived fuel is low. The multi-year TNRCC study was notable in that it focused on not only the health risks, but, more importantly, on the actual health effects of nearby residents. The suboption also assumes that all permitted incinerators have had special provisions imposed through omnibus that more stringently address dioxins and furans than the control levels now being achieved by interim status cement kilns. EPA quite clearly does not have the record to support this assumption and, in fact, the current rulemaking record demonstrating BIF compliance shows that interim status cement kilns are just as likely to control dioxins and furans in a superior manner as compared to permitted incinerators. Furthermore, based upon the omnibus guidance that has been used for incinerator permitting over the last few years and the permit conditions of which we are aware, we believe it is manifestly and wholly illogical for EPA to assume that commercial incinerators operating under RCRA permits would somehow deal more effectively with EPA's concerns than interim status cement kilns. Unless EPA has data and information in the record to support this assumption across the board, such a regulatory distinction would be arbitrary and capricious.

FOOTNOTES /1 In the NODA., EPA reports the HWC MACT proposed limit as 0.20 ng D/F TEQ/dscf. The units are translated incorrectly and should be 0.20 ng D/F TEO/dscm. /2 "Emissions Testing of Ash Grove Cement Company Foreman, Arkansas Waste-Derived Fuel Facility Cement Kiln No. 3, May 19, 1995.

RESPONSE

The commenter has submitted comments on each regulatory suboptions EPA proposed to assure compliance with an alternative treatment standard of combustion ---"CMBST"--- . Adoption of the "CMBST" standard will allow the disposal of F032 without the need for

monitoring the concentrations of D/F constituents in the treated F032 wastes. The commenter urges EPA to withdraw suboptions 2 and 3, and to promulgate, suboption 1. In addition, the commenter submitted extensive comments and studies which the commenter believes may lead EPA to conclude that the proposed suboption 2 (i.e., the proposed MACT air emission limit for D/F) is flawed.

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. EPA believes that Omnibus permit authorities under RCRA and other available environmental federal/state laws can be used to support the establishment of 3004(m) treatment standards and thus, to prescribed appropriate technological controls on treatment methods prescribed for these wastes. EPA has promulgated specific performance standards for the operation of incinerators combusting certain acutely toxic wastes that contain D/F constituents (see 40 CFR 264.343 (a) (2) and 50 FR 2005, January 14, 1985). EPA has promulgated similar kinds of technology treatment standards for hazardous wastes regulated under 268.42 and hazardous debris 268.46. These specific treatment standards under 268.42 and 268.46 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 of the human health and the environment.

Like other commenters, this commenter has presented persuasive and factual 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. The 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 PH2A021

COMMENTER J. H. Baxter

RESPONDER JL

SUBJECT WOOD1

SUBJNUM 021

COMMENT A. Treatment Standard for F032 Wastes J.H. Baxter is encouraged by the alternative treatment method for F032 wastes described in EPA's suboption 1. 61 Fed. Reg. 21421. This option is based on a review of information submitted in response to EPA's initial proposal, including waste characterization data from Vulcan Chemical and economic information from, inter alia, J.H. Baxter. Suboption 1 would allow F032 wastes to be combusted in devices that meet the "CMBST" standard set forth in the final Phase III rule issued on April 8, 1996, while suboptions 2 and 3 are more restrictive.

RESPONSE

EPA is promulgating treatment standards that set numerical limits for the regulation of Dioxin and Furan (D/F) hazardous constituents in F032. In response to comments from the Penta Task Force and the American Wood Preserving Institute, the EPA has also proposed and is promulgating in today's rule an alternative compliance treatment standard that sets combustion ("CMBST") as a treatment method for D/F constituents in F032.

EPA has promulgated, however, a revised "CMBST" compliance alternative which limits the availability of the "CMBST" to those combustion devices in compliance with applicable combustion standards in the 40 CFR 264 Subpart O, or 40 CFR 266. F032 wastes combusted in combustion devices operating under 266 or 264 do not have to monitor the concentrations of D/F left behind in combustion residues. However, the facilities must meet UTS numerical limits applicable to each organic and metal constituent regulated in F032 as a prerequisite to land disposal.

It should be emphasized that facilities seeking the combustion of F032 in an incinerator regulated under a 40 CFR 265 Subpart O do not qualify for a "CMBST" treatment standard. F032 residues arising from 40 CFR 265 units must meet the applicable UTS numerical limits for each regulated D/F constituent as a prerequisite to land disposal.

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. EPA believes that Omnibus permit authorities under RCRA and other available environmental federal/state laws can be used to support the establishment of 3004(m) treatment standards and thus, to prescribed appropriate technological controls on treatment methods

prescribed for these wastes. EPA has promulgated specific performance standards for the operation of incinerators combusting certain acutely toxic wastes that contain D/F constituents (see 40 CFR 264.343 (a) (2) and 50 FR 2005, January 14, 1985). EPA has promulgated similar kinds of technology treatment standards for hazardous wastes regulated under §268.42 and hazardous debris §268.46. These specific treatment standards under §§268.42 and 268.46 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 of the human health and the environment.