

DCN PH2A003 COMMENTER Penta Task Force RESPONDER JLABIOSA **SUBJECT** WOOD12 003 SUBJNUM COMMENT The Penta Task Force is comprised of the two U.S. manufacturers of penta -- Vulcan Chemicals, a division of Vulcan Materials Company, and KMG-Bernuth, Inc. Penta is the chlorophenolic chemical used in wood preserving processes that generate F032 waste. Accordingly, the Penta Task Force is profoundly affected by the Agency's August, 1995 Phase IV LDR proposal and the May 10, 1995 Notice of Data Availability.

RESPONSE

DCN PH2A009 COMMENTER Dow Chemical Company RESPONDER JLABIOSA **SUBJECT** WOOD12 **SUBJNUM** 009 COMMENT The Dow Chemical Company (Dow) appreciates this opportunity to comment on this important Notice of Data Availability and respectfully submits these comments on the notice published in the May 10, 1996 Federal Register pages 21,418 - 21,422. Dow is only submitting comments on item 2 Treatment Standards for Wood Preserving Waste F032, and Potentially, F024. RESPONSE

DCN PH2A010 COMMENTER EDF RESPONDER JLABIOSA SUBJECT WOOD12 SUBJNUM 010

COMMENT These comments are submitted to the U.S. Environmental Protection Agency (EPA) in response to the Agency's notice of data availability (NODA) related to the land disposal restrictions (LDR) program under the Resource Conservation and Recovery Act (RCRA). EPA's NODA was published in the Federal Register at 61 FR 21418 (May 10, 1996). Description of the Commenter EDF is a national non-profit environmental advocacy organization with more than 300,000 members dedicated to the protection of human health and the environment by inter alia. eliminating unnecessary exposure to hazardous substances, including hazardous wastes. EDF members live, work, and recreate in areas immediately affected by the improper management of hazardous and industrial wastes, including the hazardous wastes addressed in this NODA. EDF participates extensively in RCRA implementation and oversight, including activities in the regulatory, legislative, and judicial contexts. The NODA Generally Though published under the title "Notice of Data Availability", the current notice largely requests comment on issues for which the Agency lacks data, has never proposed regulatory language, and/or never articulated a rationale or methodology for reaching a particular position. In many cases, the only material on which EPA seeks comment is the position of other commenters.

RESPONSE

EPA believes that it clearly presented certain issues for supplemental comment in a legitimate manner. The issue is whether there should be an alternative means of compliance for the CDD/CDF standards. EPA proposed an alternative whereby monitoring was unnecessary if treatment was conducted in certain types of devices. The basis for the alternative standard was that if the device is combusting efficiently and demonstrates compliance with all other organic standards through monitoring, compliance with CDD standards would also be demonstrated. EPA has adopted essentially this approach in the final rule, the alternative being available only to combustion devices subject to at-the stack controls which show efficient combustion conditions (these are BIFs and permitted incinerators, all of whom would be subject to continuous CO or HC standards, and in some cases, to at-the-stack CDD/CDF controls, plus interim status incinerators able to demonstrate equivalent performance.) EPA believes that this level of combustion is a valid alternative way of expressing BDAT for the CDDs in the wood preserving wastes.

DCN PH2A010 COMMENTER EDF RESPONDER JLabiosa SUBJECT WOOD12 SUBJNUM 010

COMMENT Conclusion EPA should abandon issues raised in the NODA not ripe for consideration in this rulemaking, and promulgate the necessary treatment standards as expeditiously as possible reflecting the comments expressed herein. RESPONSE

EPA believes that the revised suboption 3 allowing the combustion of F032 and F024 in combustion devices regulated under 40 CFR 264 Subpart O, and 40 CFR 266 Subpart H, fully addresses EDF concerns that these wastes are combusted in a manner that will achieve the numerical CDD standard. The Agency's experience with F024 wastes, which can achieve these same standards (as established initially in the June 1989 Second Third rulemaking), demonstrates that combustion properly conducted can treat CDDs to this level. See also information in the BDAT Background Document for these wood preserving wastes. EPA believes it is warranted to adopt this alternative standard, because a) the standard is equally effective at minimizing threats posed by land disposal of wood preserving wastes; and b) the alternative creates desirable flexibility and is likely to provide more available treatment capacity for these wastes, thus further minimizing threats by increasing the likelihood that treatment will occur promptly. EPA's past experience with F024 wastes again supports these conclusions.

EPA has deferred the proposed MACT standard for the combustion of F032 and F024 to the MACT rule, scheduled for promulgation in April 1998. EPA believes that adoption of such proposed treatment standard for F024 and F032 may impose regulatory burden on the combustion industry while technical issues on the proposed air emission for D/F-MACT limit are still being deliberated. EPA believes that the existing CO/HC standards, plus at-the-stack controls on D/F, are adequate to assure that the treatment standard for D/F will be met without analysis. EPA's experience with F024 wastes in 1989 lends credence to commenters' concerns that there will be insufficient capacity without this compliance alternative. EPA therefore has decided to adopt it.

DCN PH2A011 COMMENTER Vinyl Institute RESPONDER JLabiosa SUBJECT WOOD12 SUBJNUM 011 COMMENT On behalf of our client, the Vinyl Institute (VI), a division of The Society of the Plastics Industry, Inc. (SPI), we are pleased to submit the following comments on the above-captioned matter. 61 Fed. Reg. 21,418 (May 10, 1996). As discussed below, we

support suboption 1 as it relates to F024 wastes.

RESPONSE

DCN PH2A012 COMMENTER Beazer East RESPONDER JL SUBJECT WOOD12 SUBJNUM 012

EPA has identified three suboptions for implementation of the COMMENT proposed alternative treatment method. Suboption 1 would apply the existing F024 combustion treatment standard to F032. Suboption 2 would establish the incineration/combustion alternative standard but would require the combustion unit to achieve a dioxin/furan emission standard. Thus, such units would be required to install controls to limit the potential for forming and emitting dioxin/furan emissions into the atmosphere or adsorption into the waste. EPA has suggested that the dioxin/furan emission standard proposed by EPA under the Clean Air Act, that is, a maximum toxicity equivalent emission standard of 0.2 mg/dscf for combustion units burning RCRA-hazardous wastes, could be a requirement of the combustion alternative treatment standard. Under this suboption, any RCRA-permitted or interim status combustion device capable of meeting the 0.20 mg/dscf standard would be allowed to combust F032. The third suboption would limit the combustion of F032 waste to combustion devices that have been permitted (i.e., Suboptions 1 and 2 would apply to interim status and fully-permitted facilities but under Suboption 3 only fully-permitted facilities could accept hazardous waste). 61 Fed. Reg. 21421.

RESPONSE

In today's final rule, EPA is promulgating, as proposed, numerical limits and an alternative compliance treatment standard for the regulation of each Dioxin and Furan (D/F) constituent regulated in F032 and F024. After reviewing public comments, EPA decided not to promulgate suboptions 1 and 2. In addition, EPA amended the proposed suboption 3 and promulgated a revised combustion --"CMBST" --- treatment standard alternative that meets BDAT under the Land Disposal Restrictions. The revised "CMBST" standard is only available for those units operating pursuant to permit conditions under 40 CFR 264, Subpart O, or operating under the Part 266 standards for BIFs. F032 or F024 wastes treated pursuant to the "CMBST" treatment compliance alternative do not have to be monitored to see if the numerical limits for D/F constituents have been achieved. However, the other organic and metal constituents must be analyzed to assure they meet the applicable UTS limit as a prerequisite to land disposal.

Facilities who choose to combust F032 or F024 in an incinerator operating pursuant to 265 provisions must meet the applicable treatment limit for each one of the regulated D/F

constituents, organics, and metals as a prerequisite to land disposal. EPA also believes that facilities operating a Part 265 incinerator that can demonstrate to EPA that their combustion device operates in a manner that conforms to the combustion controls achieved by Part 264 incinerators or Part 266 BIFs may qualify for the CMBST treatment standard pursuant to a treatability variance under 268.42(b). (See Final Background Document for Wood Preserving Wastes F032, F034, and F035, April 15, 1997, and today's preamble discussion.)

DCN PH2A012 COMMENTER Beazer RESPONDER JLabiosa SUBJECT WOOD12 SUBJNUM 012

COMMENT Beazer East, Inc. ("Beazer"), and its subsidiaries and affiliates with headquarters in Pittsburgh, Pennsylvania, hereby submit comments in response to the United States Environmental Protection Agency's ("EPA's" or the "Agency's") notice of data availability for the Land Disposal Restrictions Phase IV Proposed Rule - Issues Associated with Clean Water Act Treatment Equivalency, and Treatment Standards for Wood Preserving Wastes and Toxicity Characteristic Metal Wastes, 61 Fed. Reg. 21418, May 10, 1996 (hereinafter referred to as the "Notice"). On August 22, 1995, EPA proposed the Land Disposal Restriction ("LDR") Phase IV rule ("proposed Phase IV rulemaking") (60 Fed. Reg. 43654) which, among other things, set forth proposed treatment standards for newly listed and characteristic wastes. Beazer provided comments to the August 22, 1995 Notice of Proposed Rulemaking which addressed the proposed LDRs for wood preserving wastes F032, F034 and F035. These comments are incorporated by reference as if fully set out herein. See, Comments of Beazer East, Inc. Regarding the August 22, 1995 Notice of Proposed Rulemaking and Request for Comment on Land Disposal Restrictions - Phase IV, November 17, 1995. In the instant Notice, EPA discusses certain data and comments that it has received in response to the proposed Phase IV rulemaking and requests comments on certain issues raised by the Phase IV proposal commenters. 61 Fed. Reg. 21419.

RESPONSE

DCN PH2A014
COMMENTER Env. Technologies Intl
RESPONDER JLABIOSA
SUBJECT WOOD12
SUBJNUM 014
COMMENT II. Treatment Standards for Wood Preserving Waste F032, and Potentially F024 In this NODA, EPA has suggested three alternative treatment standards for F032 wood preserving wastes. 61 FR at 21420-21. ETC is considering these alternatives in greater detail and will provide supplemental comment.
RESPONSE

EPA did not receive supplemental comments from ETC with regard to the proposed "CMBST" treatment standard alternative and each one of the three proposed not mutually exclusive suboptions.

DCN PH2A015 COMMENTER CKRC RESPONDER JLABIOSA SUBJECT WOOD12 SUBJNUM 015

COMMENT In the following paragraphs, CKRC comments on specific concerns raised within each NDA option to set an alternative treatment standard for F032 wastes that the Agency has published for comment, but stresses the importance of our fundamental process concern as it is applicable to each specific issue identified in this comment letter.

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 is premature. The standards are only proposed, and may well undergo change as a result of public comments received. EPA intends to finalize the proposed MACT standards in April 1998. EPA believes further that until MACT standards are promulgated, standards for permitted incinerators and for BIFs (which may be supplemented by conditions adopted pursuant to permit writer's omnibus authority, upon a proper site-specific demonstration of need) are sufficient to assure that D/F in the waste will be destroyed to the level of the treatment standard. The particular controls are those assuring proper combustion efficiency, and, for some units, at-the-stack D/F standards. EPA therefore has modified its proposal.

DCN PH2A016 COMMENTER DuPont RESPONDER JLABIOSA SUBJECT WOOD12 SUBJNUM 016

COMMENT DuPont is pleased to submit one original, two paper and one computer disk ASCII file copy of our comments on the Environmental Protection Agency's notice of data availability for Land Disposal Restrictions Phase IV Proposed Rule--Issues Associated With Clean Water Act Treatment Equivalency, and Treatment Standards for Wood Preserving Wastes and Toxicity Characteristic Metal Wastes published in the Federal Register on May 10, 1996. DuPont is a generator and treater of hazardous wastes which are potentially impacted by this rulemaking, once final. If there are questions regarding any of the information provided in this package, please call me at 302-774-8056. DuPont appreciates your consideration of these comments.

RESPONSE

DCN PH2A021 COMMENTER J. H. Baxter RESPONDER JLABIOSA SUBJECT WOOD12 SUBJNUM 021 COMMENT LH Paytor &

COMMENT J.H. Baxter & Company (J.H. Baxter) submits these comments on the information set forth in the above-referenced notice. J.H. Baxter is a family-owned company in the wood preserving industry. J.H. Baxter is very concerned about the potential impact of the proposed regulations on the industry and submitted comments on EPA's August 1995 Notice proposing land disposal restrictions for certain wood preserving wastes. Two aspects of EPA's May 10 Notice concern J.H. Baxter: 1) treatment standards for F032 wastes; and 2) excluding wood preserving waste waters from the definition of solid waste.

RESPONSE

DCN PH4P113 COMMENTER Chemical Manufacturers Association RESPONDER JL SUBJECT WOOD12- "Non Detection Limits" SUBJNUM 113 COMMENT

B. EPA should allow concentration-based as well as technology-based criteria to satisfy BDAT for metals in nonwastewater forms of F032, F034, and F035. In the preamble, EPA indicates that for metal in nonwastewater forms of F032, F034, and F030, stabilization is BDAT for chromium (total), and that vitrification is BDAT for arsenic. Use of the word "is" and not the phrase standards "... are based on" implies that the Agency intends to allow only the use of these specific technologies to treat these constituents to levels below which these wastes may be land disposed. However, the regulatory language in the table at 268.40 indicates that the nonwastewater standards for arsenic and chromium are numerical standards CMA has commented in the past that it generally favors concentration-based treatment standards for BDAT and that it supports the allowance of technology-based standards as an alternative to, and not as a replacement for, concentration-based standards. We maintain this position. Although the Agency and CMA may not currently be aware of technologies other than stabilization and vitrification that could be used to treat for chromium and arsenic in the wastes described above, we favor the flexibility afforded by a concentration-based standard which would allow any technology that can meet these levels as an alternative. CMA requests that the preamble language be modified to clarify that any technology that can meet the levels indicated in the table may be used.

In addition, EPA is proposing F032 wastewater and nonwastewater standards that would require meeting a concentration that does not exceed 1 ppb (or 1 ug/kg) for all the PCDD and PCDF homologue and isomer constituents proposed for regulation for F032 wastes. Even if a 1 ug/kg level is achievable for PCDD and for PCDF, analytical limitations may preclude UTS levels this low.

Normally when EPA sets treatment standards for a waste constituent, a procedure is followed in which both an "accuracy correction factor" and a "variability factor" are applied to the concentration of the constituent observed in the treatment data that supports the standard. See, Final Best Demonstrated Available Technology (BDAT) Background Document for Universal Treatment Standards Volume A: Universal Treatment Standards for Wastewater Forms of Wastes, 52 (July 1994). The accuracy correction factor is used to account for analytical limitations in the available treatment performance data, and the variability factor is used to correct for variations in waste treatment, sampling, analytical techniques and procedures, and other factors that affect treatment performance.

However, we are not sure if EPA accounted for variability and accuracy in setting the universal treatment standards for nonwastewater forms of these organic wastes We urge EPA to do so. As CMA has previously written in its July 9, 1993 comments on the May 24,1993 Interim final rule on land disposal restrictions for ignitable and corrosive characteristic wastes whose treatments standards were vacated, organic wastestreams are not easily analyzed for constituents at very low concentrations. CMA reiterates its previous recommendation that EPA explicitly states that, given approved test methods, nondeductible levels of constituents are equivalent to zero concentration and should also be applied this the setting of UTS levels.

RESPONSE

The commenter raised four issues and EPA's responses to such comments follow below:

1. Clarification that EPA is setting numerical limits for the regulation of Arsenic and Chromium (total) in wastewater and nonwastewater forms of F032.

EPA is clarifying in today's final rule that EPA is promulgating UTS limits for the regulation of Arsenic and Chromium (total) in F032, F034, and F035. Since EPA is establishing UTS limits that are expressed as maximum concentrations of these metals allowed for land disposal, the use of any treatment technologies capable of meeting the UTS limits is not prohibited except for those that may constitute impermissible dilution.

2. "Analytical Difficulties" may preclude the establishment of UTS limits for F032.

EPA's lacks data from the commenter to assess what kind of technical difficulties will be encountered during the analysis of F032 wastes.

After reviewing the characterization data of the Penta Group, the reported analytical difficulties, and F032 Characterization studies; EPA has concluded that the reported "difficulties" appear to represent more the unfamiliarity of chemists performing the chemical analyses with D/F recommended test methods rather than real flaws in the test method. EPA believes further that the alleged "difficulties" can easily be overcome by routine laboratory clean-up procedures and the use of appropriate solvents and other laboratory calibration techniques. EPA has enhanced, therefore, the discussion of these recommended procedures and calibration techniques in the BDAT Background Document. *Also, see the Administrative Record supporting today's Phase*

4 final rule for the technical document titled: Background Paper Addressing Technical Issues Related to Analysis of F032 Wood Preserving Wastes for Dioxins and Furans, dated June 19, 1996.

3. EPA should correct the D/F limits for accuracy and variability.

Several commenters were correct in pointing it out that EPA did not correct the proposed UTS limits for D/F in F032 with accuracy and variability factors, as typically done in the calculation of treatment standards of other hazardous constituents prohibited from land disposal. EPA did not adjust the proposed UTS limits for D/F constituents, nor EPA is doing so in today's final rule, as explained below.

The UTS treatment limits are based on combustion technologies that EPA believes will meet the proposed UTS limits for D/F in F032 as long as the combustion of F032 is conducted in a device that is well designed and well operated. EPA concluded in the Solvents and Dioxins rule that a six-nines Destruction and Removal Efficiency (DRE) combustion device can routinely achieve the promulgated limit (see January 18, 1986, 51 **FR** (1733-1735)). Based on the performance of a four-nines DRE rotary kiln incinerator burning F024, EPA believes that a four-nines DRE unit that is well designed and operated can also meet the promulgated UTS limits for D/F (see June 1, 1990, 55 **FR** (22580-22581). Although none of the submitted comments or data appear to support the revisions to D/F limits proposed by the commenters, EPA may revisit this issue in a separate rulemaking if new data become available.

However, EPA points out to the commenter that EPA generally allows deviations from the promulgated treatment limits to concentration of up to one order of magnitude above the applicable treatment standard (i.e. the numerical UTS limit) prescribed in the 40 CFR 268.40, for the ashes arising from combustion devices. EPA refers to such treatment limits allowances as the analytical detection limit (compliance) alternative. Facilities seeking the disposal of such combustion ashes must satisfy the provisions in the 40 CFR 268.40 (d) (1) through (3) and 268.7 (b) (5) (iii). (Also, see June 1, 1990, 55 **FR** (22541-22542).)

In addition, EPA has set an alternative compliance treatment standard that sets combustion "CMBST" as a treatment standard for D/F for nonwastewater forms of F032. To qualify for a "CMBST" treatment standard, the combustion device should be operated under a 40 CFR 264 Subpart O or under a 266 operating permit and the Permit writer will use his/her Omnibus power authorities to determine if a combustion device seeking to treat F032 can be deemed well operated and well designed combustion devices. If deemed a well operated and designed combustion device, the facility will not have to monitor the concentrations of D/F constituents in wastewater and nonwastewater forms arising from the combustion of F032. EPA feels therefore that such alternative compliance treatment standard fully addresses the concerns raised by the commenters.

4. Proposal that "nondetection limits" are equivalent to zero detection.

EPA believes the commenter is concern that a detection limit in a treated waste above a UTS numerical limit may fail to meet the applicable treatment standard even if the targeted analyte is below the detection limit. EPA believes that a "nondetection limit" is not feasible way to address this concern. EPA believes that a constituent shown below a particular targeted detection limit means that the constituent is either destroyed by the employed technology, mask in the waste residue due to matrix interferences, or it could be measured in concentrations below the targeted detection limit. As a result, it could be possible that the constituent of LDR concern is still above the applicable UTS limit should the targeted selection limit be above the UTS promulgated limit. Therefore, EPA believes that a facility could still be deemed in violation of the applicable limit if EPA detects such constituent above its UTS limit.

However, EPA points out to the commenter that EPA generally allows deviations from the promulgated treatment limits to concentration of up to one order of magnitude above the applicable treatment standard (i.e. the numerical UTS limit) prescribed in the 40 CFR 268.40, for the ashes arising from combustion devices. EPA refers to such treatment limits allowances as the analytical detection limit (compliance) alternative. Facilities seeking the disposal of such combustion ashes must satisfy the provisions in the 40 CFR 268.40 (d) (1) through (3) and 268.7 (b) (5) (iii). (Also, see June 1, 1990, 55 **FR** (22541-22542).) Another option available to the commenter is to verify if the waste of concern is different from the one supporting the UTS limit and seek from EPA a treatability variance pursuant to provisions in the 40 CFR 268.44.