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Appendix B: Appendix A: Full Text of Comments from 1995 and 1999 HWIR Proposals on the Revision to 40 CFR 261.3 to Exempt Wastes Listed Solely for Ignitability, Corrosivity and/or Reactivity

# ICR1 General Comments on the Proposed Exemption

ICR1 - Bristol-Myers Squibb Co., WHWP-00202, 6, 1 Industry

[...] The current "mixture rule" exemptions should apply to all wastes. BMS also recommends that EPA consider a limited expansion of the current mixture rule exemptions. As currently drafted, the exemptions set forth in 40 C.F.R. Section 261.3(a)(2)(iii) & (iv) apply only to wastes subject to the "mixture rule." This has led to the anomaly that a waste may qualify for an exemption under the mixture rule, while essentially identical wastes may not be exempt because there is no "mixture" or because they contain a "derived from" waste. For example, it is quite possible that a wastewater stream regulated as an F003 spent solvent will not be ignitable or exhibit any other hazardous waste characteristic. Nonetheless, under current regulations, the wastewater will be regulated as a hazardous waste unless another solid waste is mixed with it. Similarly, the mixture rule exemptions do not apply to wastes subject to the "derived from" rule. Yet, in these cases there is no health, safety, or environmental risk which justifies the differences in regulation. The Agency in the past has been willing to liberally apply the mixture rule exemptions in any situation where mixing might occur. See, e.g., Letter of Matthew A. Straus, Chief, Waste Identification Branch, to Mr. Frank J. Fox, Jr. (October 7, 1985). [Note: See hardcopy of Comment WHWP-00202, Exhibit B, to review this letter]. However, there is no legitimate basis for requiring a "mixture" before this exemption applies to a waste which no longer exhibits a hazardous waste characteristic. BMS, therefore, recommends that 40 C.F.R. Section 261.3(a)(2)(iii) be revised to read: It is a solid waste which contains a hazardous waste that is listed in subpart D of this part solely because it exhibits one or more of the characteristics of hazardous waste identified in subpart C of this part (including mixtures which contain such hazardous wastes and solid wastes derived from such hazardous wastes), unless the solid waste no longer exhibits any characteristic of hazardous waste .... Further, references to the "mixture" and "resultant mixture" in the remainder of Section 261.3 (a)(2)(iv) should be replaced by the words "solid waste." Similarly, BMS recommends that 40 C.F.R. Section 261.3(a)(2)(iv) be revised to begin: It is a mixture of solid waste and one or more hazardous wastes listed in Subpart D of this part, and/or one or more wastes subject to regulation under 40 C.F.R. Section 261.3(c)(2)(i), and has not been . . . These revisions will avoid unnecessary regulation of waste streams which pose no hazard.

ICR1 & MDF2 - Proler International Corp., WHWP-00175, 2, 3 Waste Mgmt. Co. Proler supports the change that EPA proposes to the derived-from rule (60 FR 66349) that would remove wastes listed because they exhibit the characteristic of ignitability, corrosivity, or reactivity when, after treatment, such wastes no longer bear any of these characteristics or the toxicity characteristic. Proler believes that this change will promote waste minimization and more effective recycling. With this change, Proler supports retention of the mixture and derived-from rules.

ICR1 - Eli Lilly and Co., WHWP-00201, 15, 2 Industry
Lilly believes that the Agency should modify the derived-from rule for treatment residuals as soon as possible, even if the issuance of the final HWIR is delayed. Lilly understands that many

commentors are suggesting that the risk assessment proposed in HWIR be re-evaluated and re-proposed. While Lilly supports the Agency's attempt to base the risk assessment on the best scientific principles, Lilly does not believe that the modification Lilly suggests to the derived-from rule for treatment residuals needs to be delayed until that work is done. Lilly supports the stated purpose of the HWIR rule to remedy the substantive overbreadth of the mixture and derived-from rules. Indeed, the Company believes that such action is long overdue. [...]

# ICR1 - Eli Lilly and Co., WHWP-00201, 15,2 Industry

[...] Lilly urges the Agency to promulgate a modification to the derived-from rule for residuals from RCRA permitted treatment facilities as soon as possible, but no later than the existing February, 1997 court-ordered deadline.

#### ICR1 - Eli Lilly and Co., WHWP-00201, 1,2 Industry

The Agency's stated purpose in proposing the HWIR rule is to remedy the substantive overbreadth of the so-called "mixture" and "derived-from" rules, which classify as hazardous wastes essentially all wastes that contain or are derived-from listed hazardous wastes, regardless of the composition or properties of the mixtures or derivatives. See., e.g., 57 Fed. Reg. 21450-452 (May 20, 1992); 60 Fed. Reg. at 66346-347. Lilly strongly supports the Agency's efforts to ensure that only those wastes that are truly "hazardous" are subject to regulation under Subtitle C. The Company is concerned, however, that the HWIR proposal does not achieve this important goal.

ICR1 - Missouri Dept. of Natural Resources, WHWP-00034, 1,4

While the task is obviously complex, we approve of the common sense idea that wastes that no longer exhibit hazardous characteristics should not be regulated as if they pose the same risks as wastes that do exhibit hazardous characteristics.

# ICR1 - SOCMA, WH2P-00035, 1,3 Industry Assn.

[...] SOCMA supports and is greatly encouraged by EPA's proposal to exclude ICR listed waste from the derived from rule.[...]

#### ICR1 - AFPA, WH2P-00018, 1,4 Industry Assn.

[...] AF&PA particularly agrees with EPA's proposal to narrow the scope of the mixture and derived-from rule to enable wastes listed solely for the characteristics of ignitability, corrosivity, or reactivity ICR) which no longer exhibit those characteristics to be managed outside the restrictive hazardous waste program. AF&PA believes that by narrowing the coverage of the MDF rule, it will make the RCRA hazardous waste program more practical without endangering human health or the environment. Because these wastes no longer exhibit a hazardous waste characteristic, there is no reason for them to be managed within the strict confines of the hazardous waste program. And, because state industrial waste programs have become more sophisticated in the last decade, there is assurance that these wastes will be managed properly. This may not have been the case in 1985 when the original MDF was conceived. Therefore, AF&PA fully supports

EPA's proposal to narrow the MDF rule.

MDF2 & ICR1 - NY Dept. of Env. Conservation, WH2P-00048, 1,2

This Department is generally supportive of the concept of retaining the mixture and derived-from rules. We support EPA's proposed amendment for wastes that are listed solely because of a characteristic, with one modification. We suggest two other possibilities where these rules could be amended without sacrificing protection of human health or the environment.

MDF2 & ICR1 - NY Dept. of Env. Conservation, WH2P-00048, 3,1

Comments of the New York State Department of Environmental Conservation on the Hazardous Waste Mixture and 'Derived-From Rules In the November 19, 1999 Federal Register, EPA proposed to retain the mixture and derived- from rules with some amendments. While requesting comments on various possibilities for amending these rules, the only amendment actually proposed by EPA relates to hazardous wastes that are listed solely because they exhibit a characteristic. The Department generally supports the retention of both rules and, with one small modification, the amending of these rules with respect to hazardous wastes that are listed solely for a characteristic. In addition, the Department suggests that other amendments upon which EPA seeks comment might also be feasible under appropriate conditions that will ensure continued protection of human health and the environment. Comments on specific issues are as follows:

MDF2 & ICR1 - Hazardous Waste Mgmt Assn., WHWP-00186, 2,1 Waste Mgmt. Assn. HWMA supports [the retention] of the mixture and derived-from policy, and limiting its applicability to wastes listed because they exhibit characteristics other than toxicity. This policy, as the Agency notes in the proposal, is at the heart of the RCRA subtitle C program.

ICR1 - Lake City Army Ammunition, WHWP-00040, 1 2 Industry
The proposed rule has been reviewed and, in general, is supportive of the LCAAP mission. In several important respects, the proposal would reduce the overregulation of low-risk wastes, which are currently captured by the mixture and derived-from rules at LCAAP.

# ICR1 - DuPont, WHWP-00182, 3,3 Industry

DuPont supports the Agency proposal to create an exemption to the derived-from rule for wastes listed solely because they exhibit hazardous waste characteristics RCRA currently provides an exemption from the definition of a hazardous waste for mixtures of hazardous wastes listed solely because they exhibit a hazardous waste characteristic and non-hazardous solid wastes, providing the resulting mixture no longer exhibits any RCRA hazardous waste characteristics. This exemption was discussed at length in 46 FR, 56582, November 17, 1981 and is found at 40 CFR 261.3(a)(2)(iii). At the time the exemption for such mixtures was promulgated, the Agency did not consider a parallel exemption for RCRA hazardous wastes listed solely because they exhibit a hazardous waste characteristic that are subject to the "derived-from" rule. (The derived-from rule

is set forth as 40 CFR 261.3(c)(2)(i)). The Agency acknowledges that such wastes appear to present similarly low risks if they no longer exhibited any RCRA hazardous waste characteristics and were treated to meet Part 268 Land Disposal Restrictions (LDRs) treatment standards. The Agency has been aware of the discrepancy in the scope of the mixture and derived-from rule for many years. DuPont is pleased that the Agency is taking this opportunity to address this disparity and is supportive of the creation of an exemption to the "derived-from" rule for this limited category of listed wastes. One waste listed solely for a hazardous waste characteristic is K044, wastewater treatment sludge's from the manufacturing and processing of explosives. K044 is listed solely due to the reactivity characteristic. Residues derived-from the treatment of K044 to eliminate reactivity currently retain the K044 RCRA hazardous waste code. The elimination of the K044 code for derived-from residues would be of benefit to our remediation efforts where the presence of listed waste codes complicates groundwater pump/treat/re-injection considerations and adds significant cost where treatment residue removal to RCRA hazardous waste landfills (Subtitle C facilities) is required due to the K044 "derived-from" code. DuPont agrees with the Agency that there is no reason to treat derivatives of wastes listed solely because they exhibit a characteristic of a RCRA hazardous waste any differently than it treats mixtures of such wastes because both present similar low risks to human health and the environment. DuPont encourages the Agency to move forward at the earliest opportunity with this exemption to the derived-from rule.

ICR1 - Industrial Environmental Assn., WHWP-00166, 2,4 Industry Assn.

In the proposed HWIR rule, EPA suggests creating a parallel exception for derived-from waste (in 1981, EPA modified the original mixture rules by providing an exception for mixtures of solid wastes and listed hazardous wastes which were listed solely because [they] exhibited a hazardous waste characteristic if the resultant mixture no longer exhibited the characteristic). Both the mixture rules and the derived-from rules both present similar low risks to human health and the environment. Because of this the derived from rule should be similar to that of the mixture rule established in 1981.

#### ICR1 - Kentucky NREP, WHWP-00206, 6,3 State

[The] proposal to make the derived-from rule consistent with the mixture rule is appropriate when derived-from wastes no longer exhibit the characteristics of ignitability, corrosivity or reactivity.

# ICR1 - USWAG, WHWP-00089, 71,2 Utility Co./Assn.

USWAG supports EPA's proposal to remedy a long-standing discrepancy between the mixture rules and the derived-from rules. In 1981, EPA modified the original mixture rules by providing an exception for mixtures of solid wastes and listed hazardous wastes which were listed solely because they exhibited a hazardous waste characteristic if the resultant mixture no longer exhibited the characteristic. See 40 C.F.R. Section 261.3(a)(2)(iii). The rationale for the exception was that such wastes no longer posed the risks for which they were listed and, therefore, did not merit Subtitle C regulation. EPA now proposes creating a parallel exception for derived-from wastes.

60 Fed. Reg. at 66349. The Agency correctly notes that there is "no reason to treat derivatives of wastes listed solely because they exhibit the characteristic of ignitability, corrosivity, or reactivity any differently from the way it treats mixtures of such wastes because both present similar low risks to human health and the environment." Id. /1 USWAG strongly supports the creation of such an exception for this limited class. 1/ EPA is proposing to exclude wastes listed because of the toxicity characteristic from this exemption because the Agency states that there are risk concerns with the TC constituents below TC levels. EPA notes that, to date, the Agency has never based a listing determination on the toxicity characteristic.

# ICR1 - Pacifi Corp., WHWP-00108, 29,1 Utility Co./Assn.

PacifiCorp supports EPA's proposal to remedy a long-standing discrepancy between the mixture rules and the derived-from rules. In 1981, EPA modified the original mixture rules by providing an exception for mixtures of solid wastes and listed hazardous wastes which were listed solely because they exhibited a hazardous waste characteristic if the resultant mixture no longer exhibited the characteristic. See 40 C.F.R. Section 261.3(a)(2)(iii). The rationale for the exception was that such wastes no longer posed the risks for which they were listed and, therefore, did not merit Subtitle C regulation. EPA now proposes creating a parallel exception for derived-from wastes. 60 Fed. Reg. at 66349. The Agency correctly notes that there is "no reason to treat derivatives of wastes listed solely because they exhibit the characteristic of ignitability, corrosivity, or reactivity any differently from the way it treats mixtures of such wastes because both present similar low risks to human health and the environment." Id. 1/. PacifiCorp strongly supports the creation of such an exception for this limited class of derived-from wastes. 1/ EPA is proposing to exclude wastes listed because of the toxicity characteristic from this exemption because the Agency states that there are risk concerns with the TC constituents below TC levels. EPA notes that, to date, the Agency has never based a listing determination on the toxicity characteristic.

ICR1 - Jersey Central P&L Co., WHWP-00220, 8,3 Utility Co./Assn.

JCP&L supports EPA's proposed modification of the derived-from rule to exempt from RCRA

Subtitle C wastes derived from listed wastes which were listed solely because they exhibited a
hazardous characteristic if the resultant derived-from waste no longer exhibits the relevant
characteristic.

ICR1 - General Public Utilities, WHWP-00239, 10,1 Utility Co./Assn. GPU supports EPA's proposed modification of the derived-from rule to exempt from RCRA Subtitle C wastes derived from listed wastes which were listed solely because they exhibited a hazardous characteristic if the resultant derived-from waste no longer exhibits the relevant characteristic.

ICR1 - Ohio Dept. of Health, WH2P-00044, 1,2

We support the proposed rule to modify the definition of hazardous waste as a small step in the right direction. However, the rule does not go far enough, and should go beyond the delisting of 29

wastes from the mixture and derived from rules. These 29 wastes are those that were only on the hazardous waste list as a characteristic waste. If the generator or treatment facility can verify that the residues left after meeting LDR treatment standards no longer meets the definition of a characteristic waste, and it also does not contain a listed waste, then the waste should not be considered a hazardous waste. The option should not be limited to twenty-nine wastes but be based on a regulatory process.

## ICR1 - Ohio Dept. of Health, WH2P-00044, 2,1 State

The listing and delisting processes of identifying hazardous waste as required in section 3001 of RCRA subtitle C is for the protection of human health and the environment. To continue protecting human health and the environment, a treated hazardous waste should continue to be a hazardous waste only if it has a hazardous waste characteristic or still contains a listed waste component.

# ICR1 - SOCMA, WH2P-00035, 12,4 Industry Assn.

SOCMA Supports EPA's Proposal To Exclude ICR Listed Wastes from the Derived-from Rule, But Considers This Proposed Modification Insufficient Relief In the HWIR Proposal, EPA's only proposal for substantive relief from the overly inclusive effect of the mixture and derived-from rules is for a limited subset of listed hazardous wastes the so-called ICR listed wastes. The term ICR listed wastes refers to those wastes that are identified as listed hazardous wastes solely for the characteristics of ignitability, corrosivity, and/or reactivity. EPA has identified 29 waste codes in the RCRA listed waste program as being listed solely for one or more of these three characteristics. See 64 Fed. Reg. at 63390-91. Under the current regulations, a mixture of any of these ICR listed wastes and a solid waste is no longer a hazardous waste if the mixture no longer exhibits a hazardous characteristic. 40 C.F.R. § 261.3(a)(2)(iii). The resulting mixture is, however, still subject to the land disposal restrictions requirements of 40 C.F.R. § 268.40. EPA is now proposing to expand this exemption for ICR listed wastes by exempting from regulation as hazardous wastes any wastes derived from treatment of ICR listed wastes so long as the derivatives no longer exhibit a hazardous characteristic. In effect, EPA proposes to exempt ICR listed wastes from the derived-from rule, as well as from the mixture rule. As with the current mixture rule exemption, the ICR listed waste derivatives would still be subject to the land disposal restrictions requirements of 40 C.F.R. § 268.40. In the HWIR Proposal, EPA provides estimates of the potential impact of the proposed exemption for ICR listed wastes from the derived-from rule. See 64 Fed. Reg. at 63347-48. Generally, EPA projects that ICR listed waste streams are comprised of 87% wastewaters and 13% nonwastewaters and that 75% of the potentially exempt waste streams are identified by a F003 waste code plus a characteristic waste code, with an additional 19% being identified only by the F003 waste code. EPA estimates the cost savings from this proposed exemption at \$4.29 - 6.56 million per year. SOCMA supports the proposed ICR listed waste exemption. A select number of SOCMA member companies generate wastes that would be covered by the exemption, and they concur with EPA's assessment that these wastes should be exempted from regulation. The continued application of the derived-from rule to these wastes, once they no longer exhibit a characteristic, would only mandate continued management of low-risk wastes; in accordance with more costly requirements that are not justified by the nature of the wastes. However, SOCMA notes that the regulatory relief provided by this proposal is

insufficient in light of the overall regulatory burden imposed by the mixture and derived-from rules. A minor regulatory modification that generates \$4-6 million in cost savings cannot be said to constitute a true revision of the mixture and derived-from rules.

ICR1 - General Electric Corp., WH2P-00005, 1,3 Industry

GE Offers Qualified Support for Proposed Changes to the Mixture and Derived-From Rules GE supports the limited revisions to the mixture and derived-from rules EPA has proposed, but believes that the scope of these revisions is far too narrow. Furthermore, GE's qualified support of the proposed revisions should not be interpreted as agreement that EPA had authority to impose the mixture and derived-from rules in the first instance. [...]

# ICR1 - General Electric Corp., WH2P-00005, 1,3 Industry

[...] With regard to commercial chemical products, the most common derived-from residuals (off-specification species, container residues and spill residues) are also specifically listed, so eliminating the derived-from rule for these listings again has very limited benefit. As for the other wastes potentially impacted by the rule, there are very few companies that generate K044, K045, or K047. GE and other cost conscious firms dispose of unused chemicals only when absolutely necessary, and the just in time supply policies increasingly integrated into business mean the already small amount of these wastes is continuing to decrease. While any proposed relief is welcomed, GE urges EPA to promulgate changes to provide more meaningful change in the hazardous waste program. The recommendations made by the Chemical Manufacturers' Association and discussed later in these comments provide several specific ways to do so.

ICR1 & MDF1 - General Electric Corp., WH2P-00005, 1,2 Industry In summary, GE supports the proposed exemptions to the extent that they go, but urges EPA to promulgate a final rule that provides significantly more relief than what is proposed. At the same time, we continue to question the legal basis and environmental need for the mixture and derived-from rules. [...]

#### ICR1 - BP Amoco Oil, WH2P-00001, 1,2 Industry

We support the proposed exemption for mixtures of and materials derived from the 29 wastes listed solely for the Ignitability, Corrosivity, and Reactive characteristics. The proposal to revise the exemption from the definition of hazardous waste to mixtures of and materials derived from the 29 wastes listed solely for the characteristics of Ignitability, Corrosivity, and Reactivity will narrow the scope of the mixture and derived from rules. Such materials will be exempt if they no longer exhibit a characteristic (are decharacterized) and meet Land Disposal Restriction (LDR) requirements including treatment for underlying hazardous constituents. While the exemption represents relief from the overly-broad provisions of the current derived from rule, the exemption will apply only to a relatively small quantity of wastes. The majority of derived from wastes will still be subject to all of the Subtitle C requirements even though they, too, pose extremely low risks to human health and the environment.

# ICR1 - NEDA RCRA, WH2P-00012, 1,4 Industry Assn.

That being said, however, NEDA RCRA supports the proposed revisions to the mixture and derived-from rules as a first-step to limit the unnecessarily broad scope of the mixture and derived-from rules. NEDA RCRA fears, however, that the proposed revisions likely will have little effect beyond eliminating the derived-from rule for F003 listed wastes. NEDA RCRA thus urges EPA to extend the changes to encompass other waste streams that pose similar low risks.

ICR1 - Virginia Power, WH2P-00016, 2,2 Utility Co./Assn.
PURPOSE OF RULE If "Mixture and Derived-From" rule is re-promulgated, Virginia Power urges EPA to expand the existing exemption for mixtures with wastes listed solely for a hazardous characteristic to wastes managed under the "Derived-From" rule.

#### ICR1 - Safety-Kleen, WH2P-00019, 2,3 Industry

Exemption for Waste Listed Solely Because it Exhibits a Characteristic Safety-Kleen supports the exemption from the "mixture and derived-from" rule for those wastes listed solely because they exhibit the ignitability, corrosivity or reactivity characteristic. We also agree that the wastes should be decharacterized as a condition of claiming the exemption. [...]

ICR1, MDF10 & CMA1 - Methacrylate Producers Assn., WH2P-00020, 1,2 Industry Assn. MPA has three main comments. First, MPA endorses EPA's efforts to modify the mixture and derived from rules. Second, EPA should ensure that existing delisting petitions for substances that are currently included in Appendix VIII of 40 CFR Part 261 be considered promptly in the order in which they are submitted. Third, MPA endorses the regulatory approach identified in the Chemical Manufacturers Association (CMA) letter to EPA of August 18, 1999. These three main issues are discussed below.

ICR1 - Methacrylate Producers Assn., WH2P-00020, 2, 1 Industry Assn.

The first MPA comment relates to the mixture and derived from rules. EPA has proposed treating wastes that contain constituents that are listed as hazardous due to their ignitability, corrosivity, or reactivity, but which no longer exhibit these characteristics, as nonhazardous wastes. EPA has listed 29 waste constituents that it concludes would qualify for this exemption from the RCRA requirements. 64 Fed. Reg. 63390-91 These proposed changes in the treatment of wastes that are no longer hazardous is a progressive and long overdue step that will reduce unnecessary regulatory controls on wastes which are no longer hazardous. Modifications of the mixture and derived from rules has long been a goal of both EPA and the regulated community. The current requirements label and control wastes as hazardous based merely on the processing history of the waste, and not on the actual constituents and properties of the wastes, The proposed changes will treat wastes in a more uniform and consistent manner.

ICR1 - Basic Acrylic Monomer Manufacturers, WH2P-00021, 11,2 Industry Assn.

CONCLUSION BAMM supports the general goal of EPA's proposed Hazardous Waste Identification Rule of tailoring waste management requirements to the risks posed by wastes, and exempting low risk wastes from burdensome Subtitle C regulation. To best achieve the objectives of EPA's proposed rule, and to be consistent with the requirements of RCRA and general principles of administrative law, EPA should finalize its proposed changes to the mixture and derived from rules. This will allow wastes containing low levels of acrylic acid, and which therefore present insignificant risks, to be eligible for exemption from the RCRA requirements. The implementation of these changes will result in significant savings to generators of low risk waste and ultimately consumers. EPA's proposal to add acrylic acid to the list of wastes that can be exempted from RCRA requirements Appendix VIII is justified based on the extensive health effects data available for this compound. The evidence shows that acrylic acid is a mild irritant in the diluted state in which it would be found in wastes, it does not cause specific systemic toxicity, and it is not a carcinogen, teratogen, mutagen or reproductive toxicant.

ICR1 - Occidental Chemical Corp., WH2P-00046, 6,3 Industry EPA should Exclude "ICR Wastes" from the derived-from rule wastes. OxyChem and OVLP support this long-overdue proposal to exempt wastes listed solely for characteristics of ignitability, corrosivity and reactivity (ICR wastes) from the derived-from rule, though it is only meager relief from a rule that EPA itself acknowledged upon promulgation to be overly inclusive. We believe this proposal is consistent with statutory intent and well within EPA's legal mandate. It represents a well-considered means of tailoring RCRA to exempt from hazardous waste management those wastes which do not pose a threat to human health and the environment.

ICR1 & ICR4 - Coalition of Responsible Waste Mgmt., WH2P-00045, 1,2 Other CRWI would like to comment on the following three areas. 1. CRWI agrees with the Agency that residuals from wastes listed solely because they exhibit the ignitability, corrosivity, and/or reactivity characteristic should not continue to be defined as hazardous waste after the characteristic has been removed through treatment. Where incineration is successfully used to remove the ignitability characteristic, the resulting ash will not exhibit the ignitability characteristic and should no longer be treated as such. Thus, CRWI supports EPA's proposed action to exempt all 29 waste codes listed in Table 1 of the preamble (64 FR 63390) if they are de-characterized and meet all appropriate land disposal restriction treatment standards.

ICR1 - DaimlerChrysler, WH2P-00042, 1,3 Industry

Wastes Listed Solely for Ignitability, Corrosivity and/or Reactivity. DCC agrees the 29 categories of waste listed solely because they exhibit ignitability, corrosivity and/or reactivity characteristics should be subject to the same regulatory exemptions under the mixture and derived from rules.

ICR1 & ICR2- BP Amoco Chemicals, WH2P-00041, 1,4 Industry BP Amoco Chemicals supports EPA's proposal to exempt mixtures and derivatives of wastes listed solely due to the ignitability, corrosivity and reactivity (ICR) characteristics. We support this relatively limited exemption and suggest the Agency modify the proposed exemption so it

applies to wastes listed solely due to any of the four characteristics, including the toxicity characteristic. [...]

# ICR1 - CMA Panels, WH2P-00039, 2,1 Industry Assn.

Acetone, cumene, cyclohexane, methyl isobutyl ketone (MIBK), butanol and ethyl acetate are listed wastes under RCRA solely on the basis of ignitability. Under the current version of the derived-from rule, however, wastes of these chemicals continue to be subject to RCRA regulation, even if the waste no longer displays ignitability or any other hazardous characteristic. The Panels believe that there is no environmental or human health basis for continuing to regulate these de-characterized wastes and that EPA has ample legal discretion to exempt such wastes from Subtitle C regulation. Consequently, the Panels strongly endorse EPA's proposed modification to the derived-from rule.

# ICR1 - CMA Panels, WH2P-00039, 6,1 Industry Assn.

[...] In short, the Panels strongly support EPA's proposed modification of the derived-from rule to exempt wastes listed solely on the basis of ignitability, corrosivity or reactivity once those wastes have ceased to exhibit the hazardous characteristic. The proposed revision is scientifically sound, represents excellent public policy and is well within EPA's legal discretion. The Panels also believe that the adoption of the various other reforms to the mixture and derived-from rules proposed by CMA represent the logical next step in accurately matching the degree of regulation to the risks actually posed by a given waste.

# ICR1 & ICR4 - General Motors, WH2P-00038, 1,2 Industry

GM supports EPA's proposal to exclude from the definition of hazardous waste those ICR (ignitable, corrosive, reactive) hazardous wastes that no longer exhibit ICR characteristic(s) and wastes derived-from the treatment, storage, or disposal of ICR wastes which no longer exhibit ICR characteristics. However, GM does not support the requirement for these excluded wastes to meet the land disposal restrictions of 40 CFR Part 268. Applying LDR's to a waste which is exempt because it no longer meets the hazardous waste criteria is unnecessarily burdensome, costly and is a contradiction of the RCRA program fundamental requirements, as explained below.

# ICR1 & ICR 4 - Pioneer Americas, WH2P-00036, 2,4 Industry

Pioneer whole-heartedly supports EPA's proposal to revise the Hazardous Waste Identification Regulations for wastes listed solely for ignitability, corrosivity, and/or reactivity. The proposed revision would exempt these wastes from being handled as hazardous wastes when de-characterized and meeting appropriate LDR treatment standards. When de-characterized, EPA would also treat all these wastes alike, whether they arose from a mixture, a residual from treatment, or a waste meeting the original listing description as generated. This proposal more closely matches the required treatment to the hazard presented by these wastes than do the mixture and derived-from rules as originally written.

#### ICR1 - SOCMA, WH2P-00035, 6,2 Industry Assn.

[...] SOCMA supports the Agency's proposal to exclude ICR listed wastes from the derived-from rules and considers it a perfect illustration of how the Agency can and should start to provide substantive relief from inappropriate applications of the mixture and derived-from rules. 2. See discussion in Section III, infra.

# ICR1 & MW1 - CMA, WH2P-00033, 2,1 Industry Assn.

CMA supports the modifications the Agency is proposing (relating to wastes listed as hazardous because they exhibit characteristics of ignitability, corrosivity, and reactivity and for hazardous-radioactive mixed wastes). While the changes are certainly justified on both policy and technical grounds, they represent only a small step toward addressing the over breadth of the mixture and derived-from rules. We hope the Agency agrees they should be considered a down payment on more meaningful reforms.

# ICR1 - CMA, WH2P-00033, 15,2 Industry Assn.

EPA should Exclude ICR Wastes from the derived-from rule wastes. CMA supports this long-overdue proposal to exempt wastes listed solely for characteristics of ignitability, corrosivity and reactivity (ICR wastes) from the derived-from rule, though it is only meager relief from a rule that EPA itself acknowledged upon promulgation to be overly inclusive. CMA believes this proposal is consistent with statutory intent and well within EPA's legal mandate. It represents a well-considered means of tailoring RCRA to exempt from hazardous waste management those wastes that do not pose a threat to human health and the environment. [...]

# ICR1 - API, WH2P-00031, 1,3 Industry Assn.

Proposed Revision to the Derived-From Rule A. EPA is proposing to amend the derived-from rule at 40 CFR 261.3(c)(2)(i) so that residues derived from the treatment, storage, or disposal of wastes that are listed solely on the basis of the characteristics of ignitability, reactivity and/or corrosivity, but that no longer exhibit the characteristic(s), would cease to be regulated as a hazardous waste (provided the residues meet Land Disposal Restriction Requirements). 1 64 Fed. Reg. 63390. API supports the general concept and reasoning behind the proposed exclusion. This amendment would expand a similar provision under the mixture rule that has existed since 1981. Given the broad scope of the mixture and derived-from rule, and because huge quantities of wastes that pose little or no risk are now subject to Subtitle C, any relief from the overly broad derived-from rule is welcome. However, the proposed exclusion will only affect a small portion of wastes subject to the derived-from rules. The majority of such wastes will remain subject to stringent Subtitle C requirements, even if they pose little or no risk. API urges EPA to revise slightly the language of the proposed exclusion. As drafted, the proposal would exclude decharacterized wastes from regulation. Proposed 40 CFR 261.3(g)(1). This suggests that the wastes may still technically be considered listed hazardous wastes under EPA's Subtitle C jurisdiction, and that EPA is merely exercising discretion not to require the wastes to comply with Subtitle C regulations. It would be more accurate for the amendment to be revised to clarify that the decharacterized wastes cease to be considered hazardous wastes, and thus are not subject to

#### ICR1 - Maine DEP, WH2P-00028, 1,3 State

The Department agrees that wastes listed solely because they exhibit the characteristic of ignitability, corrosivity, or reactivitity (I, R, or C) should be treated identically to characteristic wastes as far as the mixture and derived rules are concerned, provided the waste could not be listed for any other reason before limiting the applicability of the mixture and derived from rules. [...]

# ICR1 - ETC, WH2P-00034, 4,1 Waste Mgmt. Assn.

Exemption for Derivatives From Hazardous Wastes Listed for Characteristics The ETC opposes an exemption for residuals derived-from treatment of the 29 hazardous wastes that were listed because of ignitability, corrosivity and/or reactivity (ICR) characteristics, even though the exemption would apply only to derivatives that no longer exhibit a characteristic and that comply with the LDR treatment standards for any underlying hazardous constituents in the listed wastes. 64 Fed. Reg. at 63,390-92. EPA has always acknowledged that the ICR characteristics are only a gross screen for identifying hazardous wastes that clearly warrant Subtitle C control, and these 29 listed wastes typically and frequently contain other toxic constituents at levels that may pose risks even after LDR treatment. These residuals should be disposed in Subtitle C permitted landfills or otherwise properly managed within the RCRA system. [...]

## ICR1 & ICR4 - NY Dept. of Env. Conservation, WH2P-00048, 3,3 State

Wastes Listed Solely Because they Exhibit a Characteristic. Currently, residuals that are derived from such wastes (e.g., combustion ash) are still listed, even though the residual may not exhibit the characteristic for which the parent waste was listed. However, if the material were a mixture rather than a treatment residual, it would be exempt from everything but LDRs under the current mixture rule, as long as the mixture did not exhibit the appropriate characteristic. The proposed rule would expand the exemption, which is currently in the mixture rule only, so that all these materials would be exempt from hazardous waste regulation if they are de-characterized and meet the appropriate LDR treatment standards, including treatment for all underlying hazardous constituents. In short, mixtures and residues that do not exhibit the characteristic will not be hazardous wastes, once they comply with LDR standards.

ICR1 & ICR2 - Caufield Enterprises, WHWP-00035, A1,5 Consultant We believe that certain refinery wastes were listed due to the toxicity criteria for chromium. We strongly support EPA's proposal to create a new exemption to the derived from rule. Once a material no longer exhibits a characteristic of ignitability, corrosivity or reactivity, they should be exempt. This should include toxicity

ICR1- API, WHWP-00106, 15,1

Industry Assn.

EPA is proposing to amend the derived-from rule at 40 CFR 261.3(c)(2)(1) so that residues derived from the treatment, storage, or disposal of wastes that are listed solely on the basis of the characteristics of ignitability, reactivity or corrosivity but that no longer exhibit the characteristic would cease to be regulated as a hazardous waste, provided the residues meet Land Disposal Restriction Requirements. With the caveat noted below, API believes that it is sound for the Agency to develop such an exemption. As EPA notes, a parallel exemption has existed under the mixture rule since 1981. Moreover, given the broad scope of the mixture and derived-from rule and the fact that huge quantities of wastes that pose little or no risk are now subject to Subtitle C, any exemption from the overly broad derived-from rule is welcome. However, the exemption will only affect a small portion of wastes subject to the mixture and derived-from rules; the majority of wastes will still be subject to unnecessarily stringent Subtitle C requirements even though they do not pose any risks to human health and the environment. [...]

## ICR1 - DOE, WH2P-00007, 5,1 Federal Govt.

EPA proposes to revise the Mixture Rule (40 CFR 261.3(a)(2)(iii)) and the Derived-From Rule (40 CFR 261.3(c)(2)(i)). Under the existing regulations, mixtures of a solid waste and hazardous wastes listed solely because they exhibit the ignitability, corrosivity, reactivity, and/or toxicity characteristics are no longer considered RCRA hazardous wastes if the mixtures no longer exhibit any hazardous characteristics. The proposed revision would change this regulatory approach/exemption so that it would apply to the following wastes and materials, provided that such wastes or materials do not exhibit any characteristic of hazardous waste and meet the appropriate LDR treatment standards: residuals from treatment, storage or disposal of hazardous wastes listed solely because they exhibit the characteristics of ignitability, corrosivity, and/or reactivity; mixtures of solid waste and hazardous wastes listed solely because they exhibit the characteristics of ignitability, corrosivity, and/or reactivity; and any waste listed solely for ignitability, corrosivity, and/or reactivity, which, as generated, meets an original listing description (but does not exhibit the hazardous characteristic that was the sole basis for the listing). DOE supports the conceptual basis of the proposed revision of the Mixture and Derived-From Rules. DOE agrees that the wastes which the proposal would exempt from hazardous waste regulations present sufficiently low risk to human health and the environment that regulating them as hazardous should not be necessary. Furthermore, DOE endorses consistent regulation (in cases involving an original hazardous waste listed solely because it is ignitable, corrosive, and/or reactive) of mixtures, residuals, and as-generated wastes meeting the original listing description (but not exhibiting the characteristic for which the waste was listed). [...]

# ICR1 - USWAG, WH2P-00010, 8,3 Utility Co./Assn.

If the Mixture and Derived-From Rules are Retained, They Should Include Exemptions for Mixtures and Derivatives of Wastes Listed as Hazardous Solely for Any of the Hazardous Waste Characteristics. If EPA chooses to proceed with re-promulgation of the mixture and derived-from rules despite the arguments in section I of these comments, USWAG agrees with EPA's stated intent to modify the existing, interim mixture and derived-from rules to narrow their scope and tailor them to more specifically match the risks posed by particular wastes. Id. at 63382. [...]

ICR1 - Phillips Petroleum Co., WH2P-00014, 3,3 Industry
Phillips Supports Proposed Changes to the Derived-From Rules Phillips supports EPA's
proposed revisions to the mixture and derived-from rules but believes that the scope of its
proposal is too narrow and warrants expansion. EPA is proposing to amend the derived-from rule
at 40 CFR 261.3(c)(2)(1) so that residues derived from the treatment, storage, or disposal of
wastes that are listed solely on the basis of the characteristics of ignitability, reactivity and/or
corrosivity but that no longer exhibit the characteristic(s) would cease to be regulated as a
hazardous waste, provided the residues meet Land Disposal Restriction Requirements. [...]

#### ICR 1 - DOE, WHWP-00072, 21,1 Federal Govt.

Revision to Derived-From Rule for Wastes Listed Because They Exhibit the Characteristics of Ignitability, Corrosivity, or Reactivity p. 66349, cols. 1 and 2 -- EPA indicates that the proposed HWIR includes a revision to the derived-from rule (40 CFR 261.3(c)(2)(i)) providing an exemption for wastes derived from hazardous wastes that are listed solely because they exhibited one or more of the hazardous characteristics of ignitability, corrosivity and reactivity, if the derived-from wastes no longer exhibit a characteristic. EPA also explains that the exemption requires de-characterized derived-from residuals from wastes listed because they exhibit characteristics to meet LDR treatment standards. The preamble states that the proposed exemption includes clarifying language reminding the regulated community of the need to comply with Part 268 LDR requirements for all types of derived-from residues. DOE supports the revision to the derived-from rule which EPA describes in this section of the preamble, including the described clarifying language concerning LDR compliance. [...]

ICR3 & ICR1 - Westinghouse Electric Corp., WHWP-00177, 2,4 Industry EPA proposes to create a new exemption to the derived-from rule for wastes listed because they exhibit only the characteristics of ignitability, corrosivity, or reactivity. Westinghouse supports this proposal. However, we were unable to locate the regulatory language for the change in part 261.

#### ICR1 - DoD, WHWP-L0004, 14,1 Federal Govt.

DoD supports the proposed revision to the derived-from rule which will allow exclusion for derived-from wastes provided that EPA also affords a mechanism for relief from overregulation. As EPA stated in the Preamble, "[t]he purpose of this rulemaking is to reduce any overregulation of low-risk wastes captured by the mixture and derived-from rules." 60 Fed. Reg. 66346. The HWIR exemption concept would take into consideration the importance of, and allow targeting of, limited resources on the hazardous waste problems that pose the greatest risks. HWIR recognizes that the identified wastes, mixtures, and derived-from waste residues pose low risks to human health and the environment when properly managed. Previously, the hazardous waste designation for these listed wastes was allowed to be removed when the waste mixture no longer exhibited a hazardous waste characteristic. With the promulgation of the final rule for Phase II LDR (59 Fed. Reg. 48043 (Sept. 19, 1994)), these wastes also require treatment for any underlying hazardous constituents (40 C.F.R. Section 268.2(i)) that could potentially be present in the waste mixture. It

is no longer sufficient to just "decharacterize" these wastes. Also, generator self interest in avoiding potential liability is almost certain to lead most waste generators to erect their own safeguards to ensure that these wastes are properly treated and disposed of, even though excluded from RCRA subtitle C management standards. By providing an exclusion for listed hazardous wastes, the proposed revision affords a strong incentive for generators to apply pollution prevention to their processes to avoid further subtitle C control. [...]

ICR4 & ICR1 - General Electric Corp., WH2P-00005 15,2 Industry EPA Should Clarify Preamble Statements Addressing Application of Land Disposal Restrictions to Mixtures EPA has proposed extending the part of the current mixture rule that addresses mixtures of wastes listed solely because they exhibit a characteristic with nonhazardous wastes to mixtures containing derived-from residuals (64 FR 63390, November 19, 1999). GE supports this change and believes it to be fully protective of human health and the environment. However, GE is concerned that statements made in the preamble could be misinterpreted to impose new LDR requirements on mixtures and extend them to derived-from residuals that EPA proposes to have subject to the same standard. Currently, when a waste listed only for a characteristic (e.g., F003) is mixed with a non-hazardous waste and the resulting mixture is non-hazardous the mixture is no longer a hazardous waste. (40 C.F.R. 261.3(a)(2)(iii)). However, as EPA states in the preamble, These mixtures must still meet the LDR requirements of 40 CFR 268.40. Using spent acetone (identified as F003) as an example, the applicable treatment standard is that identified for F003 at 40 C.F.R. 268.40. Since the acetone is the constituent that causes the F003 in this example to exhibit a characteristic (and since F003 is listed only because it exhibits the characteristic of ignitability), the decharacterized mixture is not subject to the LDR standard that applies to D001 (including standards for UHCs). The text of 40 C.F.R.268.9(b) is quite explicit on this point: Where a prohibited waste is both listed under 40 CFR part 261, subpart D and exhibits a characteristic under 40 CFR part 261, subpart C, the treatment standard for the waste code listed in 40 CFR part, subpart D will operate in lieu of the standard for the waste code under 40 CFR, subpart C, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise, the waste must meet the treatment standards for all applicable listed and characteristic waste codes. (Emphasis added.) In the paragraph that immediately follows EPA's statement that the mixtures must meet the LDR requirements of 40 C.F.R. 268.40, the preamble discusses extending the current mixture rule provision to derived-from residuals for wastes listed only because the exhibit a characteristic. In that discussion, EPA states: Thus, today's proposed revision would expand this exemption which is currently in the mixture rule only, so that all these materials would be exempt from hazardous waste regulation if they are de-characterized and meet the appropriate LDR treatment standards, including treatment for all underlying hazardous constituents (as defined in 40 CFR 268.3(i)). While some mixtures (and in the future, derived-from residuals) composed of wastes listed for characteristics only and non-hazardous wastes may be subject to UHCs under the existing rules, others are not. EPA should clarify that it did not intend to revise application of the current LDR rules without any discussion of why such a change would be necessary. Such a change could have significant cost implications to the regulated community without providing any significant environmental benefit and certainly would require justification by EPA.

ICR1 & HWIR - Atlantic Research Corp., WHWP-00018, 1,3 Although HWIR, as proposed, is intended to address the majority of listed hazardous wastes, it does not address a limited number of other listed wastes that are likely to pose even less risks to human health and the environment, i.e., those that are listed solely on the basis of hazardous characteristics other than toxicity (i.e., ignitability, corrosivity, or reactivity). EPA should clearly state in the final HWIR that solid wastes that meet the listing description of hazardous wastes and are listed solely on the basis of hazardous characteristics other than toxicity (i.e., ignitability, corrosivity, or reactivity), that do not exhibit the characteristic that is the basis for listing, and also do not contain any constituent concentrations above the HWIR exit levels, would not be subject to the hazardous waste management system under Subtitle C of RCRA as listed hazardous wastes. This issue is relevant only to a limited number of listed wastes, i.e., F003, K044, K045, and K047. In such cases as described above, a "hazardous" waste is never really generated. However, under HWIR as proposed, a solid waste that does not exhibit the characteristic that is the basis for listing and does not contain any hazardous constituents above the HWIR exit levels, would be ineligible for exemption from subtitle C, and must still be considered a listed hazardous waste only for the reason that it meets the listing description for wastes from non-specific or specific sources, unless that waste is delisted (excluded under 40 CFR Parts 260.20 and 260.22). Further justification/rationale for this is as follows: Hazardous wastes listed on the basis of containing toxic constituents - Any such listed hazardous wastes, or any solid waste mixed with, derived from, or containing such listed wastes, that meet the minimum threat exit levels under the Hazardous Waste Identification Rule (HWIR), as proposed, would no longer be subject to the hazardous waste management system under Subtitle C of RCRA as listed hazardous wastes. Hazardous wastes listed on the basis of both containing toxic constituents and exhibiting one or more of the hazardous characteristics other than toxicity (i.e., ignitability, corrosivity, or reactivity) - Any such listed hazardous wastes that would otherwise be exempted under the Hazardous Waste Identification Rule (HWIR), as proposed, but which still exhibit any of the characteristics, will continue to be regulated as hazardous wastes until the characteristic is removed, at which time the wastes exit Subtitle C. Mixtures of solid wastes and hazardous wastes listed solely because they exhibit one or more of the hazardous characteristics other than toxicity (i.e., ignitability, corrosivity, or reactivity) - Any such mixtures are eligible under the "Mixture Rule Exemption" [40 CFR Part 261.3(a)(iii)], to exit Subtitle C, if the resultant mixtures no longer exhibit the characteristic (note that nonwastewater mixtures are still subject to the Land Disposal Restriction requirements (LDRs)). Hazardous wastes listed solely on the basis of exhibiting one or more of the hazardous characteristics other than toxicity (i.e., ignitability, corrosivity, or reactivity) - However, any such listed hazardous wastes would not be eligible for exemption under the Hazardous Waste Identification Rule (HWIR), as proposed, or the mixture rule exemption, even if the hazardous wastes do not exhibit the characteristic that is the basis for listing, and do not contain any constituent concentrations above the HWIR exit levels. Therefore, they must continue to be regulated as hazardous wastes under Subtitle C, and the LDRs would apply, unless the wastes are delisted. Why should such a waste (even if originally exhibiting the characteristic), when mixed with a solid waste, be eligible for exemption from Subtitle C (under the mixture rule exemption), yet that same waste (that does not exhibit the characteristic and does not contain any constituent concentrations above the HWIR exit levels), would otherwise be subject to Subtitle C and the LDRs? The tenuous process of delisting is the only option available for exclusion from Subtitle C. This makes no sense. Therefore, EPA should clearly state that solid wastes that meet

the listing definition of hazardous wastes that are listed solely on the basis of hazardous characteristics other than toxicity (i.e., ignitability, corrosivity, or reactivity), that do not exhibit the characteristic that is the basis for listing (either at the point of generation or after treatment), and also do not contain any constituent concentrations above the HWIR exit levels, are eligible to exit Subtitle C.

# ICR1 - DoD, WH2P-00017, 7,1 Fed

Federal Govt.

Expanding the Scope of the Existing Mixture Rule Comment. DoD agrees with the EPA proposal to expand the scope of the existing mixture rule exemption and allow all wastes listed for ignitability, corrosivity, and/or reactivity to be treated identically, regardless of whether they are mixtures, residuals, or wastes meeting the original description as generated. [...]

#### MDF2 & ICR1 - Michigan DEQ, WHWP-00171, 4,3

State

We support the retention of the mixture and derived-from rules. These rules ensure that hazardous wastes that are mixed with other wastes, or treated in some manner, do not escape regulation if they are reasonably likely to continue to pose threats to human health and the environment. We also support the revision to the derived-from rule which is outlined in the proposed amendments.

ICR1 - Basic Acrylic Monomer Manufacturers, WH2P-00021, 4,2 Industry Assn. EXEMPTIONS FOR LOW RISK WASTES ARE NECESSARY, PRUDENT, AND LONG OVERDUE. BAMM supports EPA's attempt to develop exemption criteria for low risk wastes under the Resource Conservation and Recovery Act (RCRA). To successfully achieve the goal of minimizing the imposition of unnecessary regulatory burdens on generators of low risk waste, EPA should proceed with its current proposals for amending the mixture and derived from rules and should also carefully reexamine the current requirements to eliminate overly conservative assumptions and unduly stringent or burdensome requirements.

ICR1 & ICR4 - Onyx Env. Services, WH2P-00015, 2, 2 Waste Mgmt. Co. II. SPECIFIC COMMENTS. 1. Wastes Listed For Ignitability, Corrosivity, and/or Reactivity. OES supports the Agency's proposal to expand the mixture rule exemption to derived-from hazardous wastes which originally were listed for ignitability, corrosivity, and/or reactivity to the 29 hazardous waste codes listed in Table 1 of the preamble (64 Fed. Reg., at 63390) if they are de-characterized, and meet all applicable treatment standards in 40 CFR 268.40.

ICR1 - Basic Acrylic Monomer Manufacturers, WH2P-00021, 2,3 Industry [...] BAMM's comments focus on the Agency's proposed treatment of acrylic acid in the HWIR proposal. BAMM agrees that waste containing acrylic acid should no longer be treated as hazardous if it is not ignitable. See Part III, below.[...].

ICR1 - Basic Acrylic Monomer Manufacturers, WH2P-00021, 6,2 Industry III. EPA'S PROPOSAL TO TREAT WASTE CONTAINING ACRYLIC ACID, THAT IS NO LONGER IGNITABLE, AS NONHAZARDOUS WILL REDUCE UNNECESSARY REQUIREMENTS AND COSTS. EPA has requested comment on whether to allow waste containing acrylic acid to no longer be classified as hazardous if the waste is no longer ignitable. See 64 Fed. Reg. 63390- 91. As discussed above, EPA's proposal concerning the mixture and derived from is long overdue and should be adopted. A review of the toxicity data for acrylic acid, when considered in its entirety, demonstrates that there is abundant data to support allowing wastes containing acrylic acid to be treated as nonhazardous when the waste is no longer ignitable. A. Toxicologic Data on Acrylic Acid Indicates That Wastes That Are No Longer Ignitable Are Not Hazardous. The stated objectives of EPA's proposed Hazardous Waste Identification Rule are to reduce the over-regulation of low risk hazardous waste while, at the same time, reducing the time and resource burden on industry and government. See 60 Fed. Reg. at 66,414. The establishment of RCRA exemptions for low-risk wastes is also intended to encourage pollution prevention, waste minimization, and the development of innovative waste treatment technologies. Id. at 66,344. Consistent with these objectives of the proposed HWIR, EPA has proposed an exemption process for low risk wastes and media containing acrylic acid. When this material is in a diluted state and no longer exhibits the characteristic (ignitability) that was the sole reason for its classification as a hazardous waste, the proposed regulation would allow the waste to be classified as nonhazardous. In its diluted state acrylic acid is not known to cause any adverse health effects other than some relatively minor irritation when inhaled. Acrylic acid is currently on the 40 C.F.R. § 261.33(f) list of commercial chemical products solely because it exhibits the characteristic of ignitability. The characteristic criteria should act as the automatic delisting threshold -- if the mixture ceases to exhibit the ignitability characteristic, the material drops from the hazardous waste universe. i. Toxicity The available toxicologic evidence on acrylic acid supports EPA's proposed inclusion of acrylic acid to the Table 1 list (64 Fed. Reg. 63391) of wastes that can qualify for exemption from RCRA requirements. A more comprehensive overview of the health effects of acrylic acid is provided in T. Cascieri and J. Clary, Acrylic Acid Health Effects Assessment, in Health Effects of the Basic Acrylates, eds. T. Tyler, S. Murphy & E. Hunt (CRC Press, 1993), pp. 9-31. A copy of this overview was attached to BAMM's February 1996 comments on EPA's earlier HWIR proposal. This overview is also included in copy of the earlier BAMM comments attached to these comments (included as Attachment A to these comments). Acrylic acid is a clear, colorless, corrosive liquid at room temperatures with a pungent odor (odor threshold is 0.1 ppm) and a vapor pressure of 3 mm Hg at 20/C. It is used primarily to produce acrylic esters and polymers with applications in paint, coatings, plastics and a variety of other uses. The toxicology of acrylic acid has been studied extensively, and the available data indicate that acrylic acid is not a carcinogen, mutagen or teratogen, and does not cause any specific systemic toxicity, i.e., specific internal organ damage. The primary adverse health effect associated with acrylic acid is a mild irritation of nasal tissue from inhalation. Of greater relevance to this rulemaking, acrylic acid has very low oral toxicity. A large number of wellconducted dermal, oral and inhalation studies have evaluated the acute toxicity, inhalation toxicity, genotoxicity, reproductive and developmental toxicity, carcinogenicity and systemic toxicity of acrylic acid. The results from those studies are summarized in more detail in BAMM's February 1996 comments (included as Attachment A to these comments). ii. Environmental Effects The environmental fate and effect of acrylic acid has been well studied, and the available data suggest

that a relatively high level of acrylic acid would not be hazardous and therefore should be permitted under the HWIR proposals. Acrylic acid is not expected to persist in the environment due to its high water solubility, low bioconcentration factor, and extensive breakdown under both aerobic and anaerobic conditions as indicated by biodegradation studies and through treatment facility measurements. For example, the half-life of acrylic acid when exposed to the atmosphere is approximately 6 hours. A survey of the work performed to confirm these properties was included in BAMM's February 1996 comments (Attachment A to today's comments). iii. Conclusion A review of the extensive toxicology data available for acrylic acid shows that the only demonstrated health effect of exposure to dilute acrylic acid in animals is a minor, reversible irritant effect in the upper respiratory tract after inhalation. Acrylic acid has very low oral toxicity. Several well-conducted studies indicate that acrylic acid is not a carcinogen, mutagen or teratogen, and does not cause specific systemic toxicity, i.e., specific internal organ damage. Given this extensive health database, there is no reasonable basis for classifying wastes containing low levels of acrylic acid as hazardous. B. EPA's Proposed Action Will Have A Major Positive Impact Based On The Significant Quantities of Acrylic Acid Consumed Each Year. Acrylic acid is a widely used chemical that is necessary for the manufacture of a broad range of products. These products include paints, plastics, coatings and other popular products. Annual domestic production of acrylic acid has been estimated by EPA to be over one billion lbs. per year. The wide use of acrylic acid and its relatively benign characteristics provide an opportunity for significant societal cost savings through the promulgation of the revised mixture and derived from rules. By including acrylic acid wastes in the eligible chemicals for the exemption, manufacturers, and eventually consumers and society at large, will reap the benefits.

# ICR1 - CMA Panels, WH2P-00039, 2,2 Industry Assn.

Background On November 19, 1999, EPA proposed changes to the RCRA mixture and derived-from rules. 64 Fed. Reg. 63382. The mixture and derived-from rules were initially promulgated by EPA to close envisioned loopholes in the new Subtitle C hazardous waste management system. In its basic form, the mixture rule provides that any mixture of a solid waste and a hazardous waste will also be considered hazardous. 40 C.F.R. 261.3(a)(2)(iv). Similarly, the derived-from rule provides that any solid waste generated from the treatment, storage or disposal of a hazardous waste will be considered hazardous. 40 C.F.R. 261.3(c)(2)(i). The rationale for these provisions was that without them, hazardous waste generators or treatment operators could potentially evade regulatory requirements by mixing or minimally treating the hazardous waste to create a new waste that arguably no longer met the listing criteria, but that could continue to pose a serious hazard to human health or the environment However, the rules have proven to be overly inclusive. The effective result has been to create a system in which any mixture or residue of a listed waste, including wastes listed solely on the basis of ignitability, corrosivity or reactivity, can never escape Subtitle C regulation, regardless of how effectively the wastes are treated. The justification for such stringent regulation disappears for certain low risk wastes once they are treated in a manner that eliminates all significant risks to human health or the environment. In recognition of this fact, EPA included in the mixture rule an exception stating that mixtures of solid wastes and wastes listed solely on the basis of ignitability, corrosivity or reactivity will not be considered hazardous wastes, provided that the mixture does not exhibit any hazardous characteristics. 40 C.F.R. 261.3(a)(2)(iii). However, this exemption was limited to the

mixture rule only and EPA promulgated no corresponding provision for the derived-from rule. EPA is now proposing to extend to the derived-from rule this well established exception for de-characterized mixtures of wastes listed solely on the basis of ignitability, corrosivity or reactivity. EPA Has Legal Discretion to Exempt Low Risk Wastes Which Do Not Pose Significant Human Health or Environmental Risks The Panels believe that the proposed revision is well within EPA's legal mandate and represents a well-considered means of tailoring RCRA to exempt those wastes which do not pose human health or environmental risks that would warrant regulation under RCRA Subtitle C. In particular, section 3001 of RCRA provides EPA with discretion to determine whether a chemical should be subject to Subtitle C regulation. Under this section, EPA need not regulate a waste as hazardous where Subtitle C regulation is inappropriate. Subtitle C regulation applies only to wastes which meet the definition of hazardous wastes. Section 1004(5) of RCRA defines a hazardous waste as a material that may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness or that may pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed. 42 U.S.C. § 6903(5). Moreover, section 3001(a) of RCRA indicates that listing decisions are based on some demonstrable indication that the waste is hazardous and should be subject to Subtitle C regulation. In particular, this section provides that a decision to list a substance as a hazardous waste should take into account toxicity, persistence and degradability in nature, potential for accumulation in tissue, and other related factors such as flammability, corrosiveness, and other hazardous characteristics. 42 U.S.C. § 6921. Together, these sections provide clear evidence that Congress did not intend or require EPA to regulate as hazardous those low risk wastes which do not exhibit hazardous characteristics and which otherwise do not pose a significant threat to human health or the environment. However, the current formulation of the derived-from rule requires Subtitle C regulation of numerous wastes which present none of the risk which Congress enacted Subtitle C to prevent. In fact, EPA has observed that millions of tons of mixtures and derived-from residuals that must be managed as hazardous waste because of their history ... may actually pose quite low hazards. 57 Fed. Reg. 21450, 21451 (May 20, 1992). EPA has expressed concern over this lack of connection between the minimal threat posed by these wastes and the degree of regulation to which the wastes are subjected: Over time, particularly with increased treatment, the disparity between the potential risks a material poses to human health and the environment and the degree of regulatory control over the material has increased. Consistent with its continuum of control approach, EPA believes that low risk waste should not be subject to full subtitle C regulation. It is EPA's view that the subtitle C program is intended to address situations where there may be substantial present or potential [hazards] to human health or the environment from mismanagement of waste. 57 Fed. Reg. at 21451-52. Thus, the current version of the derived-from rule is inconsistent with the objectives of both Congress and the EPA. EPA's proposed modification to the derived-from rule constitutes a significant step in reconciling the practical application of RCRA with the Congressional purposes underlying the statute. The wastes affected by the proposed exemption include only those listed on the basis of ignitability, corrosivity or reactivity. For example, a waste containing acetone is listed for one reason only because it is ignitable. If the waste is incinerated (or otherwise adequately treated) the residual ash poses no further risk of ignitability. The residual waste bears little similarity to the waste from which it was derived and no longer exhibits the sole characteristic for which it was listed (or, under the current proposal, any other hazardous characteristic). In this situation, the public health and welfare concerns

underlying the initial decision to regulate the waste have been fully addressed and there is no logical basis for concluding that the treated waste is still hazardous within the meaning of RCRA. Thus, EPA's exercise of discretion to exempt these wastes from further Subtitle C regulation is entirely consistent with the underlying purposes of the statute. In the past, EPA has noted that the derived-from rule is necessary to prevent certain parties from evading regulation by minimally processing or managing a hazardous waste and claiming that the resulting residue was no longer the listed waste, despite the continued hazards that could be posed by the residue even though it does not exhibit a characteristic. 60 Fed. Reg. 66344, 66346 (December 21, 1995). Although the Panels understand EPA's concern that some wastes could continue to pose a threat to human health and the environment following some failure in treatment, EPA has fully addressed these concerns by limiting the current proposal to waste codes listed solely on the basis of ignitability, corrosivity or reactivity. These wastes either exhibit a hazardous characteristic that can be objectively tested, or they do not. Once the hazardous characteristic has been eliminated, so has the reason for treatment. Thus, EPA has effectively tailored the current proposal so as not to implicate the traditional concerns underlying the need for the derived-from rule. It is also important to note that EPA's proposed modification to the derived-from rule does not represent a new or unprecedented narrowing of the rule. Indeed, characteristic wastes currently are excluded from the mixture and derived-from rules once the wastes are decharacterized. Moreover, the mixture rule already exempts de-characterized mixtures of wastes listed solely on the basis of ignitability, corrosivity or reactivity. The proposed revision merely abolishes this anomalous distinction between the mixture and derived-from rules by extending the well established mixture rule exemption to the derived-from rule. As EPA notes, ... wastes listed solely because they exhibit the ignitability, corrosivity and/or reactivity characteristic should be treated identically, whether they are mixtures, residuals or wastes meeting the original listing description as generated. 64 Fed. Reg. at 63390. The current proposal exempts only a particular subset of wastes that do not pose a threat to human health or the environment under the Subtitle C regulation and that exhibit none of the characteristics typically identified with hazardous wastes. Moreover, the current proposal does not represent a radical departure from past practice, but merely extends the existing mixture rule exemption to the derived-from rule. Thus, it is the view of the Panels that EPA's exercise of its legal discretion to revise the derived-from rule to exclude these low risk wastes is entirely consistent with the text of RCRA and with Congressional intent. Numerous Public Policy Benefits Will Occur as a Result of EPA's Proposed Revision to the Derived-From Rule The Panels also believe that EPA's proposal constitutes good public policy. Continuing to regulate wastes which no longer exhibit any hazardous characteristics not only makes little sense from a scientific perspective, but it also results in an unnecessary diversion of the limited resources of EPA and the various state agencies charged with implementing RCRA. Like all public agencies, the federal and state regulatory bodies charged with implementing RCRA have limited resources, and the high administrative cost of environmental regulation effectively prevents those agencies from regulating all wastes. Ultimately, EPA must choose which wastes to regulate based on an evaluation of the potential public benefits of regulation. The public benefits of regulating a waste under Subtitle C of RCRA are only likely to materialize when the regulated waste actually poses a significant threat to human health and the environment. However, as indicated above, the residues exempted by EPA's proposal do not present any risks that would warrant the stringent regulation imposed under Subtitle C. Consequently, the public resources currently devoted to regulating these wastes could be far better allocated to numerous EPA and state initiatives which are more likely to produce a

public benefit. Similarly, continued Subtitle C regulation of these low risk wastes forces industry to expend scarce resources for little or no environmental benefit. In this case, EPA has estimated that adopting the current proposal would result in a reduction of between 4.3 and 6.5 million dollars per year in unnecessary compliance, transportation and disposal costs. 64 Fed. Reg. at 63447-48. This represents only a small portion of the potential billion dollar reduction in regulatory costs that EPA estimates will result if all unnecessary regulation of low risk waste is eliminated (57 Fed. Reg. 21500). However, the current proposal represents a good starting point for reducing unnecessary expenditures and opens the door for shifting these resources to more worthy environmental initiatives. Thus, EPA's changes to the derived-from rule will ultimately result in a public benefit by eliminating unnecessary costs and providing an additional source of funds for programs involving wastes that actually do pose substantial threats to human health and the environment. Finally, the Panels believe that the environmental costs of Subtitle C regulation of the wastes covered by EPA's proposal may actually have a net negative effect on the environment. Compliance with Subtitle C often requires the expenditure of vast amounts of money and energy (with concurrent emissions and waste generation) to process wastes and to transport these wastes to special hazardous waste landfills. These hazardous waste landfills have limited space, must meet strict compliance standards and require large expenditures of money and energy to sustain and operate. These economic and environmental resources are best applied to those wastes that are truly hazardous and most likely to pose significant risks to human health and the environment. No benefit to public health or the environment is achieved by requiring these energy intensive procedures for low risk wastes such as those covered by the current proposal. Under the terms of EPA's proposal, these wastes must no longer exhibit any hazardous characteristic and must meet applicable LDR standards. Thus, rather than occupying scarce space in hazardous waste landfills (which would otherwise be occupied by wastes which actually are hazardous), these wastes can be adequately managed in wastewater treatment systems and industrial, non-hazardous waste landfills. Regarding imposition of LDR treatment standards, the Panels would point out that such standards are only applicable to wastes prohibited from land disposal. In a recent interpretation, EPA clarified that wastewaters managed in tank-based systems are no subject to LDR treatment standards. Similarly, the Land Disposal Flexibility Act (codified at RCRA 3004(g)(7)-(9)) states that wastes identified as hazardous based solely on a characteristic are not prohibited from land disposal if they are managed in certain treatment systems, including those that subsequently discharge into waters of the United States pursuant to a CWA permit.

#### ICR1 - SOCMA, WH2P-00035, 13,5 Industry Assn.

III. SOCMA Urges EPA To Pursue Additional Avenues for Providing Relief from the Over-Inclusive Effect of the Mixture and Derived-From Rules While SOCMA supports the proposed ICR listed waste modification, it is painfully apparent to SOCMA that this proposal alone will not provide adequate substantive relief to SOCMA members. While this relief is beneficial for companies that generate these waste streams, further substantive modifications are needed to narrow the overly broad impact of the mixture and derived-from rules. [...]

ICR1 & MDF2 & MW1 - Eastman Chemical Co., WH2P-00050, 2,5

Industry

EPA'S PROPOSAL FAILS TO SIGNIFICANTLY ADDRESS THE PROBLEMS POSED BY THE MDF RULES The past HWIR rules the Agency has proposed have not been consistent with the goal of alternate management for high-volume, low toxicity waste, and neither is this current proposal. EPA is reinstating the MDF rules, with exemptions only for (1) mixtures and/or derivatives of wastes listed solely for the ignitability, corrosivity, and/or reactivity (ICR) characteristics and (2) mixed wastes (wastes that are both hazardous and radioactive). While supporting these two exemptions, it remains a fact that neither of these exemptions is of any use to Eastman, nor do we believe, based on our conversations with other companies, that they provide any relief to the vast majority of industry. Given our belief that the upcoming and limited exit levels will also fail to provide needed relief (discussion immediately below), it is Eastman's opinion that this latest HWIR proposal fails to meet the spirit of what Congress, the courts, industry and even EPA have historically expected in revising the MDF rules.

#### ICR2

## Adding the Toxicity Characteristic to the Expanded Exemption

ICR1 & ICR2- BP Amoco Chemicals, WH2P-00041, 1,4 Industry BP Amoco Chemicals supports EPA's proposal to exempt mixtures and derivatives of wastes listed solely due to the ignitability, corrosivity and reactivity (ICR) characteristics. We support this relatively limited exemption and suggest the Agency modify the proposed exemption so it applies to wastes listed solely due to any of the four characteristics, including the toxicity characteristic. [...]

ICR1 & ICR2 - Caufield Enterprises, WHWP-00035, A1,5 Consultant We believe that certain refinery wastes were listed due to the toxicity criteria for chromium. We strongly support EPA's proposal to create a new exemption to the derived from rule. Once a material no longer exhibits a characteristic of ignitability, corrosivity or reactivity, they should be exempt. This should include toxicity

## ICR2 & ICR3 - DOW, WHWP-00185, 9,2 Industry

Should there be a new exemption to the derived-from rule for the limited category of listed wastes that exhibit TC constituents below the TC levels? (Page 66,349 Column 2) Dow encourages EPA to revise the current exemption located at 40 CFR 261.3(c)(2)(i) to include derived-from wastes that are listed solely because they exhibit a characteristic. Dow supports EPA in including this exemption as described in Section III.B of the preamble (Page 66,349 Column 1); however, the actual regulatory language for changes to 40 CFR 261.3(c)(2)(i) are not provided.

#### ICR2 - API, WHWP-00106, 15,1 Industry Assn.

[...] Although API agrees with EPA's approach to amend the derived-from rule so that wastes listed solely on the basis of ignitability, reactivity or corrosivity would no longer be regulated as a hazardous waste, API disagrees with EPA's proposal not to apply the derived-from exemption to characteristically toxic wastes which cease to exhibit the toxicity characteristic. It is not logical to apply the exemption to derived-from wastes which are listed because they exhibit the characteristics of ignitability, corrosivity or reactivity and not also apply the exemption to wastes which may be listed because of the toxicity characteristic. It appears as if the Agency suspects that wastes containing TC constituents below the toxicity characteristic are not really safe. [...]

#### ICR2 - API, WH2P-00031, 2,3 Industry Assn.

API also supports expanding the proposal to apply to wastes derived-from wastes that are listed solely because they exhibit the Toxicity Characteristic, if the residue no longer exhibits that characteristic. It is inappropriate to use the derived-from rule to apply a hazardous waste listing that is based on the presence of certain chemical constituents that actually do not exist in the derived-from residuals at level exceeding those specified in the Toxicity Characteristic itself.

#### ICR2 - DOE, WH2P-00007, 5,1 Federal Govt.

[...] Notwithstanding, DOE has several concerns with the specifics of the proposal, which are described below. a. EPA proposes to eliminate the existing section 40 CFR 261.3(a)(2)(iii), which defines as hazardous waste a mixture of a solid waste and a hazardous waste listed solely because it exhibits a characteristic (i.e., ignitability, corrosivity, reactivity, and toxicity), unless the mixture no longer exhibits any characteristic. A new section 40 CFR 261.3(g) would be added, which would exclude from regulation any hazardous waste listed solely because it exhibits one or more of the characteristics of ignitability, corrosivity, and reactivity, if the waste no longer exhibits any characteristic. In addition, §261.3(g) would exclude from regulation any derivative of or mixture with a solid waste of a hazardous waste listed solely ecause it exhibits one or more of the characteristics of ignitability, corrosivity, and reactivity, if the derivative or mixture no longer exhibits any characteristic. DOE notes that, in this NPRM, EPA does not offer an explanation for omitting wastes listed solely because they exhibit the characteristic of toxicity from eligibility for the proposed exclusions from the mixture and derived-from rules that would be granted by 40 CFR 261.3(g). DOE is aware that, in the preamble to the initial proposal of the Hazardous Waste Identification Rule (HWIR) [60 FR 66344 (December 21, 1995)], EPA explained that, since no listings to date have been based on the toxicity characteristic, EPA is proposing to limit the new revision to the derived-from rule to wastes listed because they exhibit only the characteristics of ignitability, corrosivity, or reactivity. DOE is unaware whether any hazardous wastes have been listed since 1995 solely because they exhibit the characteristic of toxicity. However, DOE believes that it is confusing to give no explanation in this NPRM for proposing the elimination of an existing exclusion from the mixture rule, even if no wastes now exist that are eligible for the exclusion. As such, DOE recommends that the preamble for the final rule contain such an explanation.

ICR2 & ICR8 - TXU Business Services, WH2P-00008, 1,3 Utility Co./Assn. However, if EPA does proceed with re-promulgation of the mixture and derived-from rules, the final regulation should exempt mixtures and derivatives of wastes listed as hazardous solely because they exhibit any of the characteristics of hazardous waste including the toxicity characteristic if the mixture no longer exhibits any of the characteristics. In addition, F003 wastes (spent non-halogenated solvents) should remain eligible for exemption from the rule.

# ICR2 - USWAG, WH2P-00010, 4,2 Utility Co./Assn.

If EPA proceeds with re-promulgation of the mixture rule, the final rule should exempt mixtures of solid wastes with wastes listed as hazardous solely because they exhibit any of the characteristics of hazardous waste including the toxicity characteristic -- if the mixture no longer exhibits any of the characteristics. EPA can accomplish this by adopting the proposed regulatory language for 40 C.F.R. § 261.3(g) after replacing references to ignitability, corrosivity, and reactivity with references to any characteristic of hazardous waste identified in subpart C. If EPA proceeds with re-promulgation of the derived-from rule, the final rule should exempt derivatives of wastes listed as hazardous solely because they exhibit any of the characteristics of hazardous waste including the toxicity characteristic -- if the derivative does not exhibit any of the characteristics. EPA can accomplish this by adopting the proposed regulatory language for 40 C.F.R. § 261.3(g) after

replacing references to ignitability, corrosivity, and reactivity with references to any characteristic of hazardous waste identified in subpart C.

#### ICR2 - USWAG, WH2P-00010, 8,3 Utility Co./Assn.

[...] However, EPA has inappropriately limited the exemptions from the rules to wastes listed as hazardous solely for the ignitability, corrosivity, and reactivity characteristics. Wastes that may in the future be listed solely for the toxicity characteristic should similarly be eligible for the exemptions. EPA's proposal provides an exemption from the derived-from rule that reflects the currently available exemption in the mixture rule for mixtures of solid wastes with listed hazardous wastes that are listed solely for a hazardous waste characteristic when the mixture does not exhibit a hazardous waste characteristic. However, the proposed regulatory language includes an unnecessary and inexplicable restriction on the applicability of the exemption. Specifically, the proposed language for the relevant exemptions from both the mixture and derived-from rules (40 C.F.R. § 261.3(g)) specifies only three of the four existing hazardous waste characteristics ignitability, corrosivity and reactivity -- whereas the existing regulatory language for exemption from the mixture rule refers generally to the characteristics of hazardous waste identified in subpart C. See id. at 63461; 40 C.F.R. § 261.3(a)(2)(iii). As a result, EPA's proposal would restrict applicability of the existing exemption from the mixture rule (as well as the newly proposed exemption form the derived-from rule) to wastes listed for only the three specified characteristics. EPA has articulated no reason for excluding from the proposed exemption wastes listed for the toxicity characteristic. We recognize the toxic hazardous wastes listed in Part 261 Subpart D are listed for the hazard code T for toxic waste rather than the hazard code E for toxicity characteristic waste, and thus this technical limitation would not affect the currently listed hazardous wastes. Nonetheless, section 261.3 establishes the general framework for delineating the bounds of hazardous waste regulation for those wastes currently listed as well as those that might be listed in the future. Furthermore, the proposed regulatory language does not provide for any additional hazardous waste characteristics that might be promulgated in the future under authority of RCRA §3001(b). If, despite USWAG's objections to re-promulgation of the mixture and derived-from rules, EPA insists on pursuing final promulgation of the proposed language, USWAG recommends a simple modification to avoid potential complications. EPA should replace references to ignitability, corrosivity, and reactivity in the proposed regulatory language for 40 C.F.R. § 261.3(g) with references to any characteristic of hazardous waste identified in subpart C, reflecting the approach and language used in the current regulations.

# ICR2 - Duke Power, WH2P-00022, 2,5 Utility Co./Assn.

If EPA proceeds with re-promulgation of the mixture rule, the final rule should exempt mixtures of solid wastes with wastes listed as hazardous solely because they exhibit any of the characteristics of hazardous waste including the toxicity characteristic -- if the mixture no longer exhibits any of the characteristics. EPA can accomplish this by adopting the proposed regulatory language for 40 C.F.R. § 261.3(g) after replacing references to ignitability, corrosivity, and reactivity with references to any characteristic of hazardous waste identified in subpart C. If EPA proceeds with re-promulgation of the derived-from rule, the final rule should exempt derivatives of wastes listed

as hazardous solely because they exhibit any of the characteristics of hazardous waste including the toxicity characteristic -- if the derivative does not exhibit any of the characteristics. EPA can accomplish this by adopting the proposed regulatory language for 40 C.F.R. § 261.3(g) alter replacing references to ignitability, corrosivity, and reactivity with references to any characteristic of hazardous waste identified in subpart C.

# ICR 2 - Duke Power, WH2P-00022, 5,1 Utility Co./Assn.

If the Mixture and Derived-From Rules are Retained, They Should Include Exemptions for Mixtures and Derivatives of Wastes Listed as Hazardous Solely for Any of the Hazardous Waste Characteristics. If EPA chooses to proceed with re-promulgation of the mixture and derived-from rules despite the arguments in section I of these comments, the re-promulgated rules in no way should be broader in applicability than the current versions. Indeed, the narrowing of the rules' applicability, at a minimum, is in order. Duke Power commends EPA's intent to replace the existing, interim mixture and derived-from rules to narrow their scope and tailor them to more specifically match the risks posed by particular wastes. Id at 63382. However, EPA has inappropriately limited the exemptions from the rules to wastes listed as hazardous solely for the ignitability, corrosivity, and reactivity characteristics. Wastes that may in the future be listed solely for the toxicity characteristic should be eligible for the exemptions. EPA's proposal provides an exemption from the derived from rule that reflects the currently available exemption in the mixture rule for mixtures of solid wastes with listed hazardous wastes that are listed solely for a hazardous waste characteristic when the mixture does not exhibit a hazardous waste characteristic. However, the proposed regulatory language includes an unnecessary and inexplicable restriction on the applicability of the exemption. Specifically, the proposed language for the relevant exemptions from both the mixture and derived-from rules (40 C.F.R. § 261.3(g)) specifies only three of the four existing hazardous waste characteristics --ignitability, corrosivity and reactivity -- whereas the existing regulatory language for exemption from the mixture rule refers generally to the characteristics of hazardous waste identified in subpart C. See id. at 63461; 40 C.F.R. § 261.3(a)(2)(iii). As a result, EPA's proposal would restrict applicability of the existing exemption from the mixture rule (as well as the newly proposed exemption form the derived-from rule) to wastes listed for only the three specified characteristics. EPA has articulated no reason for excluding from the proposed exemption wastes listed for the toxicity characteristic. We recognize the toxic hazardous wastes listed in Part 261 Subpart D are listed for the hazard code T for toxic waste rather than the hazard code E for toxicity characteristic waste, and thus this technical limitation would not affect the currently listed hazardous wastes. Nonetheless, section 261.3 establishes the general framework for delineating the bounds of hazardous waste regulation for those wastes currently listed as well as those that might be listed in the future. Furthermore, the proposed regulatory language does not provide for any additional hazardous waste characteristics that might be promulgated in the future under authority of RCRA § 3001(b). If, despite Duke Power's objections to re-promulgation of the mixture and derived-from rules, EPA insists on pursuing final promulgation of the proposed language, Duke Power recommends a simple modification to avoid potential complications. EPA should replace references to ignitability, corrosivity, and reactivity in the proposed regulatory language for 40 C.F.R. § 26 1.3(g) with references to any characteristic of hazardous waste identified in subpart C, reflecting the approach and language used in the current regulations.

# ICR2 - BP Amoco Oil, WH2P-00001, 1,3 Industry

The proposed exemption should be extended to wastes derived from treatment, storage or disposal of wastes listed solely for Toxicity characteristic constituents. The current Section 261.3(a)(2)(iii) mixture rule exemption also appears to apply to materials listed solely on the basis of the Toxicity characteristic. The Agency noted in the preamble to the 1995 proposal (60FR 66349) that EPA has never promulgated any listings for wastes solely on the basis that they exhibit either EP Toxicity or the current Toxicity characteristic and, therefore, that the current Section 261.3(a)(2)(iii) provision applies only to mixtures containing wastes listed for the Ignitability, Corrosivity or Reactivity characteristic. This distinction has not been that clear to the regulated community. The Agency may be making this assertion on the basis that additional toxic constituents are present in wastes listed for Toxicity characteristic constituents which represent risk to human health and the environment if they are present at levels greater than UTS levels. Part 261 Appendix VII indicates that certain wastes have been listed for constituents which are included in the Toxicity characteristic. The original listed waste is still subject to all LDR treatment standards. Derived from materials which stem from treatment of this waste are physically and chemically different than the original waste. There is no technical basis to make the derived from rule exemption applicable to only three of the four characteristics. [...]

# ICR 2 & ICR4 - BP Amoco Oil, WH2P-00001, 1,3 Industry

[...] The Agency should amend the derived from rule so that residuals derived from the treatment, storage or disposal of wastes listed solely on the basis of a characteristic (including toxicity) but which no longer exhibit the characteristic and which meet applicable LDR requirements including the underlying hazardous constituent provisions would cease to be regulated as a hazardous waste. If the current mixture rule exemption does not apply to mixtures containing materials listed solely on the basis of the Toxicity characteristic, it too should be similarly amended.

# ICR2 & ICR4 - Phillips Petroleum Co., WH2P-00014, 3,3 Industry

[...] Phillips supports the Agency's proposal and also supports expanding the proposal to apply the derived-from exemption to wastes listed because they exhibit a toxicity characteristic, that cease to exhibit the toxicity characteristic and meet the LDRs applicable to the characteristic including treatment of underlying hazardous constituents (UHCs). As EPA notes, a similar exemption has existed under the mixture rule since 1981. Given the broad scope of the mixture and derived-from rule and because huge quantities of wastes that pose little or no risk are now subject to Subtitle C, any exemption from the overly broad derived-from rule is welcome. However, the exemption will only affect a small portion of wastes subject to the derived-from rules; the majority of wastes will remain subject to stringent Subtitle C requirements. EPA must justify its basis for listing. It is inappropriate to apply a hazardous waste listing that is based on the presence of certain chemical constituents, when the waste contains the subject constituents at levels below those determined to minimize threats to human health and the environment. The Agency should amend the derived-from rule so that residuals derived from the treatment, storage or disposal of wastes listed solely on the basis of a RCRA characteristic -- including toxicity -- but that no longer exhibit the characteristic

would not be regulated as a hazardous waste, provided the residues meet the LDRs applicable to the characteristic, including the treatment of underlying hazardous constituents (UHCs).

ICR2 - Virginia Power, WH2P-00016, 2,3

EXEMPTION FOR WASTES LISTED AS HAZARDOUS SOLELY FOR ANY OF THE HAZARDOUS WASTE CHARACTERISTICS Virginia Power understands that the proposed regulation would narrow the existing exemption from the mixture rule such that the rule would not apply to any wastes listed solely because of the toxicity characteristic in 40 C.F.R. § 261.24. As written, the proposed rule would exempt wastes that only have the following characteristics: ignitability, corrosivity and reactivity. However, the existing regulation exempts hazardous wastes that have "...any characteristic of hazardous waste identified in subpart C of this part..." (40 CFR § 261.3 (a)(2)(iii)). Virginia Power urges EPA to incorporate the existing language that includes, "... any characteristic of hazardous waste...," cited in 40 CFR § 261. (a)(2)(iii), as opposed to the proposed language that restricts the exemption to three of the four hazardous waste characteristics.

#### ICR3

## Lack of Regulatory language for the Expanded Exemption

# ICR3 - CMA, WHWP-00073, 20,1 Industry Assn.

[...] 1/ The preamble asserts that EPA is proposing to revise the derived-from rule to insert an exception, like the one currently contained in the mixture rule, 40 C.F.R. Section 261.3(a)(2)(iii), for mixtures of solid wastes and wastes listed solely because they exhibit a characteristic. The proposed regulatory language gives no suggestion of any such change, however. See 66440. This change would be beneficial, and CMA urges EPA to publish a technical correction notice containing the actual language EPA proposes to employ.

# ICR2 & ICR3 - DuPont, WHWP-00185, 9,2 Industry

Should there be a new exemption to the derived-from rule for the limited category of listed wastes that exhibit TC constituents below the TC levels? (Page 66,349 Column 2) Dow encourages EPA to revise the current exemption located at 40 CFR 261.3(c)(2)(i) to include derived-from wastes that are listed solely because they exhibit a characteristic. Dow supports EPA in including this exemption as described in Section III.B of the preamble (Page 66,349 Column 1); however, the actual regulatory language for changes to 40 CFR 261.3(c)(2)(i) are not provided.

ICR3 - American Auto Manuf. Assn., WHWP-00194, 2,5 Industry Assn. In the preamble EPA states that it intends to revise the derived-from rule so that (consistent with the mixture rule) derivative wastes will be exempt when they no longer exhibit characteristics of ignitability, corrosivity, or reactivity. However, in the proposed rule itself, there is no language to accomplish this. This exemption should be entirely consistent with the language of Part 261.3(a)(2)(iii), i.e., including the Toxicity Characteristic wastes. Identical to the mixture rule, this category of derivative wastes presents an equally low risk to human health and the environment and there is no reason to manage them inconsistently.

#### ICR3 - DOE, WHWP-00072, 21,1 Federal Govt.

[...] However, the actual regulatory language proposed in the HWIR notice of proposed rulemaking (i.e., the proposed amendments to the regulations beginning on 60 FR 66440) does not include language for implementing the described changes to 40 CFR 261.3(c)(2)(ii). Therefore, DOE requests that EPA incorporate appropriate regulatory language in the final HWIR rule.

#### ICR3 - DOE, WHWP-00072, 77,4 Federal Govt.

In Section III.B of the preamble (60 FR 66349, cols. 1 and 2), EPA indicates that the derived-from rule [section 261.3(c)(2)(i)] would be revised to include an exemption for derivatives of wastes listed solely because they exhibit the characteristic of ignitability, corrosivity, or reactivity, if the derivatives no longer exhibit a characteristic and were treated to meet LDR requirements. The proposed amendments to the regulatory language do not include language which corresponds to the proposed revisions to the derived-from rule [section 261.3 (c)(2)(i)] described above. EPA also

states in the preamble (60 FR 66349, col. 2) that the proposed revisions to the derived-from rule would include language reminding the regulated community of the need to comply with the part 268 LDR requirements. However, the proposed regulatory language for section 261.3(c)(2)(i) does not contain the LDR reminder.

ICR3 & ICR1 - Westinghouse Electric Corp., WHWP-00177, 2,4 Industry EPA proposes to create a new exemption to the derived-from rule for wastes listed because they exhibit only the characteristics of ignitability, corrosivity, or reactivity. Westinghouse supports this proposal. However, we were unable to locate the regulatory language for the change in part 261.

ICR3 - Kaiser-Hill Company, WHWP-00029, 2,8 Other Additional specific changes to the derived-from rule (40 CFR Section 261.3(c)(2)(i)) are recommended for wastes listed solely for their ignitable, corrosive, or reactive (ICR) characteristics. The recommended revisions would be similar to the language included in the mixture rule definitions currently found in 40 CFR Section 261.3(a)(2)(iii). Although discussed in Section III B of the preamble, the proposed language is only included in Section 261.36, exemption for listed hazardous wastes containing low concentrations of hazardous constituents. The revision to the derived-from rule language needs to be included in Section 261.3(c)(2)(i) so that it applies to newly generated derived-from wastes regardless of whether the exemption is being taken.

ICR3 - Kentucky NREP, WHWP-00206, 6,1 State Where is the revision to the derived-from rule discussed in Section III.B (Revision of the Derived-from Rule)? It is not in proposed 261.3(c)(2)(i) (p. 66440), which is only amended to add a reference to the HWIR.

ICR3 - DoD, WHWP-L0004, 14, 1 Federal Govt.

[...] (b) DoD is concerned that proposed change to the language of 40 C.F.R. Section 261.3(c)(2) (derived-from rule) in the rulemaking, 60 Fed. Reg. 66440, does not expressly set forth the language needed to revise the derived-from rule to include the mixture rule exemptions found in 40 C.F.R. Section 261.3(a) (excluding the toxicity characteristics). For DoD to support repromulgation of the mixture and derived-from rules, this exemption language must be made expressly part of the final rulemaking. [...]

# ICR4 Applicability of LDRs to Exempted Wastes

ICR4 - ETC, WHWP-00204, 7,1 Waste Mgmt. Assn.

The ETC understands that EPA intends to make very minor revisions to the derived-from rule with respect to residues of hazardous wastes that were listed solely based on the hazardous characteristics of ignitability, corrosivity, or reactivity. This revision is explained at page 66349. As proposed, we understand that EPA would ensure that such listed hazardous wastes must meet all applicable LDR treatment requirements. The ETC would oppose any revisions that exempt such hazardous wastes from the LDR standards.

# ICR4 - DoD, WHWP-L00004, 10,3 Federal Govt.

[...]Also, this should not affect the proposal to extend the exclusion at 40 C.F.R. Section 261.3(a)(2)(ii) to derived-from wastes. These listed wastes (listing due to exhibiting a characteristic -- ignitability, corrosivity or reactivity) should be allowed the proposed exemption from the hazardous waste classification and management standards regardless of which values are used to meet LDR requirements.

ICR4 - Hoechst Celanese Corp. (HCC), WHWP-00169, 4,3 Industry [...] Similarly, the rule should make clear that wastes which are exempted by the mixture rule and by the proposed exemption to the derived from rule are also exempt from the LDR requirements. [...]

## ICR4 - Safety-Kleen, WH2P-00019, 2,3 Industry

[...] We do not agree that the waste should be treated to meet all underlying hazardous constituents (UHC's). Since these wastes are listed, generators have not been required to obtain information on underlying hazardous constituents and obtaining this information would pose an undue burden for the generator. Clarification is also needed on who would be responsible for verifying whether the waste in question meets the condition of the exemption. Would this be a requirement for the generator or the facility receiving the exempted waste. The Agency has simply not provided a compelling case for requiring testing for UHC's or a clear methodology for implementing the requirements that are proposed. Please contact me at (803) 933-6431 if you have questions concerning our comments.

ICR1 & ICR4 - Coalition of Responsible Waste Mgmt., WH2P-00045, 1,2 Other CRWI would like to comment on the following three areas. 1. CRWI agrees with the Agency that residuals from wastes listed solely because they exhibit the ignitability, corrosivity, and/or reactivity characteristic should not continue to be defined as hazardous waste after the characteristic has been removed through treatment. Where incineration is successfully used to remove the ignitability characteristic, the resulting ash will not exhibit the ignitability characteristic and should no longer be treated as such. Thus, CRWI supports EPA's proposed

action to exempt all 29 waste codes listed in Table 1 of the preamble (64 FR 63390) if they are de-characterized and meet all appropriate land disposal restriction treatment standards.

#### ICR4 - BP Amoco Chemicals, WH2P-00041, 1,4

**Industry** 

[...] There is no technical basis for regulating any hazardous waste that was listed solely due to a characteristic once the characteristic is removed and appropriate land disposal restriction (LDR) standards for underlying hazardous constituents have been achieved.

# ICR1 & ICR4 - General Motors, WH2P-00038, 1,2 Industry

GM supports EPA's proposal to exclude from the definition of hazardous waste those ICR (ignitable, corrosive, reactive) hazardous wastes that no longer exhibit ICR characteristic(s) and wastes derived-from the treatment, storage, or disposal of ICR wastes which no longer exhibit ICR characteristics. However, GM does not support the requirement for these excluded wastes to meet the land disposal restrictions of 40 CFR Part 268. Applying LDR's to a waste which is exempt because it no longer meets the hazardous waste criteria is unnecessarily burdensome, costly and is a contradiction of the RCRA program fundamental requirements, as explained below.

# ICR1 & ICR 4 - Pioneer Americas, WH2P-00036, 2,4 Industry

Pioneer whole-heartedly supports EPA's proposal to revise the Hazardous Waste Identification Regulations for wastes listed solely for ignitability, corrosivity, and/or reactivity. The proposed revision would exempt these wastes from being handled as hazardous wastes when de-characterized and meeting appropriate LDR treatment standards. When de-characterized, EPA would also treat all these wastes alike, whether they arose from a mixture, a residual from treatment, or a waste meeting the original listing description as generated. This proposal more closely matches the required treatment to the hazard presented by these wastes than do the mixture and derived-from rules as originally written.

# ICR4 - CMA, WH2P-00033, 15,2 Industry Assn.

[...] CMA wants to point out to the Agency, however, that under the Land Disposal Program Flexibility Act of 1996, (LDPFA) (codified at RCRA § 3004(g)(7) – (9)) solid wastes identified as hazardous based solely on a characteristic, are not prohibited wastes under the Land Disposal Restrictions program if they are managed in certain systems including a treatment that subsequently discharge into waters of the United States pursuant to a CWA permit.1 Thus, the Agency needs to revise its proposed language modifying the mixture rule for ICR wastes in proposed 40 C.F.R. § 261.3(a)(2(ii) so that the land disposal restrictions program does not apply to wastes that are not prohibited. While the Agency initially interpreted LDPFA to not address the management of wastes listed solely for a characteristic,2 EPA revised that view in a technical correction and amended its LDR rules to clearly state – without any reference to whether the wastes were listed or characteristic — that any wastes that are hazardous only because they exhibit a hazardous characteristic, and are managed in LDPFA specified units, are not prohibited.3 EPA explained in the preamble to the technical correction that: the Agency intended to . . . put wastes listed solely

because they exhibit a characteristic on the same footing vis-à-vis the dilution prohibition as the characteristic wastes covered by the Third-Third rule. . . . Under the Third-Third rule, most characteristic wastes (whether or not they were wastewater or non-wastewater treatability group) could be permissibly managed in CWA systems and Class 1 UIC injection wells so long as they were rendered non-hazardous by any means before being placed in a land disposal unit. EPA is formally clarifying this point by means of today's discussion.4 This revision is crucial to maintain the status quo for managing wastes listed solely for a characteristic in land-based units. Imposing the LDR program on such wastes would put many surface impoundments out of compliance because they are managing decharacterized listed wastes in land-based units that do not meet RCRA's minimum technology requirements. This would put these units in violation of RCRA § 3005(j)(11) and recreate problem that LDPFA was enacted to prevent stopping decharacterized wastes from being managed in land based units that do not meet the MTRs. CMA also urges EPA to carefully redraft its proposed provision in 40 C.F.R. § 261.3(g)(3) so that derived-from wastes that are managed in facilities referenced in the LDPFA are also not considered prohibited wastes.

# ICR4 - API, WH2P-00031, 1,3 Industry Assn.

[...]1. API believes that the proposed condition regarding LDR treatment standards may be inapplicable to decharacterized mixture and derived-from wastes managed in certain permitted wastewater treatment systems or in Class I injection wells under the terms of Secs. 3004(g)(7)-(9), as added by the Land Disposal Flexibility Act of 1996, Pub. L. 104-119, 100 Stat. 830. However, assuming that Secs. 3004(g)(7)-(9) do apply, that should not prevent EPA from promulgating the proposed exclusion, since Congress already has determined that imposition of LDR standards under such circumstances would be unnecessary and would interfere unduly with those other regulatory programs.

#### ICR1 & ICR4 - NY Dept. of Env. Conservation, WH2P-00048, 3,3 State

Wastes Listed Solely Because they Exhibit a Characteristic Currently, residuals that are derived from such wastes (e.g., combustion ash) are still listed, even though the residual may not exhibit the characteristic for which the parent waste was listed. However, if the material were a mixture rather than a treatment residual, it would be exempt from everything but LDRs under the current mixture rule, as long as the mixture did not exhibit the appropriate characteristic. The proposed rule would expand the exemption, which is currently in the mixture rule only, so that all these materials would be exempt from hazardous waste regulation if they are de-characterized and meet the appropriate LDR treatment standards, including treatment for all underlying hazardous constituents. In short, mixtures and residues that do not exhibit the characteristic will not be hazardous wastes, once they comply with LDR standards.

#### ICR4 - API, WHWP-00106, 15, 1 Industry Assn.

[...] The Agency should amend the derived-from rule so that residuals derived from the treatment, storage or disposal of wastes listed solely on the basis of a RCRA characteristic (including toxicity) but that no longer exhibit the characteristic would cease to be regulated a hazardous waste, provided the residues meet the LDRs. As with other characteristic wastes, LDR standards

assure that the waste is well treated.

## ICR 2 & ICR4 - BP Amoco Oil, WH2P-00001, 1,3 Industry

[...] The Agency should amend the derived from rule so that residuals derived from the treatment, storage or disposal of wastes listed solely on the basis of a characteristic (including toxicity) but which no longer exhibit the characteristic and which meet applicable LDR requirements including the underlying hazardous constituent provisions would cease to be regulated as a hazardous waste. If the current mixture rule exemption does not apply to mixtures containing materials listed solely on the basis of the Toxicity characteristic, it too should be similarly amended.

## ICR2 & ICR4 - Phillips Petroleum Co., WH2P-00014, 3, 3 Industry

[...] Phillips supports the Agency's proposal and also supports expanding the proposal to apply the derived-from exemption to wastes listed because they exhibit a toxicity characteristic, that cease to exhibit the toxicity characteristic and meet the LDRs applicable to the characteristic including treatment of underlying hazardous constituents (UHCs). As EPA notes, a similar exemption has existed under the mixture rule since 1981. Given the broad scope of the mixture and derived-from rule and because huge quantities of wastes that pose little or no risk are now subject to Subtitle C, any exemption from the overly broad derived-from rule is welcome. However, the exemption will only affect a small portion of wastes subject to the derived-from rules; the majority of wastes will remain subject to stringent Subtitle C requirements. EPA must justify its basis for listing. It is inappropriate to apply a hazardous waste listing that is based on the presence of certain chemical constituents, when the waste contains the subject constituents at levels below those determined to minimize threats to human health and the environment. The Agency should amend the derived-from rule so that residuals derived from the treatment, storage or disposal of wastes listed solely on the basis of a RCRA characteristic -- including toxicity -- but that no longer exhibit the characteristic would not be regulated as a hazardous waste, provided the residues meet the LDRs applicable to the characteristic, including the treatment of underlying hazardous constituents (UHCs).

ICR4 - American Auto Manuf. Assn., WHWP-00194, 2,6 Industry Assn.

The applicability of LDR's to both wastewater and nonwastewater forms of mixtures and derived-from wastes should be both clear and identical. [There] is no justification for managing these wastes inconsistently. However, the real question is why should LDRs apply at all to wastes which have completely satisfied exit criteria and are no longer subject to Subtitle C management. Under existing and proposed rules, delisted wastes are not subject to LDRs. The proposed rule is, as stated by EPA, a self-implementing delisting process.

ICR4 - Caufield Enterprises, WHWP-00035, A2,1 Consultants
We also support both solid and wastewaters being handled the same under the LDR program. The
LDR clarification should also apply to the mixture rule.

ICR4 & ICR1 - General Electric Corp., WH2P-00005 15, 2 Industry EPA Should Clarify Preamble Statements Addressing Application of Land Disposal Restrictions to Mixtures EPA has proposed extending the part of the current mixture rule that addresses

mixtures of wastes listed solely because they exhibit a characteristic with nonhazardous wastes to mixtures containing derived-from residuals (64 FR 63390, November 19, 1999). GE supports this change and believes it to be fully protective of human health and the environment. However, GE is concerned that statements made in the preamble could be misinterpreted to impose new LDR requirements on mixtures and extend them to derived-from residuals that EPA proposes to have subject to the same standard. Currently, when a waste listed only for a characteristic (e.g., F003) is mixed with a non-hazardous waste and the resulting mixture is non-hazardous the mixture is no longer a hazardous waste. (40 C.F.R. 261.3(a)(2)(iii)). However, as EPA states in the preamble, These mixtures must still meet the LDR requirements of 40 CFR 268.40. Using spent acetone (identified as F003) as an example, the applicable treatment standard is that identified for F003 at 40 C.F.R. 268.40. Since the acetone is the constituent that causes the F003 in this example to exhibit a characteristic (and since F003 is listed only because it exhibits the characteristic of ignitability), the decharacterized mixture is not subject to the LDR standard that applies to D001 (including standards for UHCs). The text of 40 C.F.R.268.9(b) is quite explicit on this point: Where a prohibited waste is both listed under 40 CFR part 261, subpart D and exhibits a characteristic under 40 CFR part 261, subpart C, the treatment standard for the waste code listed in 40 CFR part, subpart D will operate in lieu of the standard for the waste code under 40 CFR, subpart C, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise, the waste must meet the treatment standards for all applicable listed and characteristic waste codes. (Emphasis added.) In the paragraph that immediately follows EPA's statement that the mixtures must meet the LDR requirements of 40 C.F.R. 268.40, the preamble discusses extending the current mixture rule provision to derived-from residuals for wastes listed only because the exhibit a characteristic. In that discussion, EPA states: Thus, today's proposed revision would expand this exemption which is currently in the mixture rule only, so that all these materials would be exempt from hazardous waste regulation if they are de-characterized and meet the appropriate LDR treatment standards, including treatment for all underlying hazardous constituents (as defined in 40 CFR 268.3(i)). While some mixtures (and in the future, derived-from residuals) composed of wastes listed for characteristics only and non-hazardous wastes may be subject to UHCs under the existing rules, others are not. EPA should clarify that it did not intend to revise application of the current LDR rules without any discussion of why such a change would be necessary. Such a change could have significant cost implications to the regulated community without providing any significant environmental benefit and certainly would require justification by EPA.

## ICR4 - DOE, WH2P-00007, 6,1 Federal Govt.

EPA makes the following statement about ignitable, corrosive, and reactive waste: "Thus, today's proposed revision would expand this exemption which is currently in the mixture rule only, so that all these materials would be exempt from hazardous waste regulation if they are de-characterized and meet the appropriate LDR treatment standards, including treatment for all underlying hazardous constituents (as defined in 40 CFR 268.3(i))." This statement is confusing with respect to the discussion of underlying hazardous constituents (UHCs), because existing 40 CFR 261.3(a)(2)(iii) contains the following statement: However, nonwastewater mixtures are still subject to the requirements of part 268 of this chapter, even if they no longer exhibit a characteristic at the point of land disposal. The proposed rule contains a similar statement in

§261.3(g)(3). DOE has always understood EPA's interpretation of the existing requirement to be that LDR treatment standards established for the as-listed waste must be met by nonwastewater mixtures. If the LDR treatment standard is in the form of constituent concentration levels, then compliant treatment would involve meeting the specified levels for the specified constituents. Further evaluation established for the as-listed waste is in the form of a specified technology, treatment using the identify or treat UHCs. [See 63 FR 42110, 42168 (August 6, 1998)] DOE requests that the final rule clarify that EPA has not changed its interpretation of the applicability of UHCs to listed wastes, and does not intend the phrase are still subject to part 268" in proposed §261.3(g)(3) to be implemented by requiring identification of UHCs according to the definition in 40 CFR 268.2(i) and treatment of UHCs to meet universal treatment standards. If EPA did so intend, it appears that the Agency is changing its established approach regarding the applicability of UHCs to listed hazardous waste.

## ICR4 - General Motors, WH2P-00038, 1,3 Industry

For a waste to be excluded proposed 40 CFR 261 3(g), it must be demonstrated by the generator that (1) the waste does not meet the criteria under which the waste was listed (ICR); and (2) the waste does not contain chemicals of concern exceeding yet-to-be established risk-based exemption levels. These exemption levels are to be established using risk models which predict the potential release of hazardous chemicals from waste management units to the air, land, surface water, and groundwater (64 FR 63392). After meeting these criteria the waste would no longer be considered a hazardous waste under RCRA subtitle C. A fundamental requirement of the LDR program is that the generator must determine if the waste is a RCRA hazardous waste; LDR requirements do not apply to non-hazardous wastes. Treatments specified within the LDR regulations, promulgated under 40 CFR 268 are required for hazardous waste to be land disposed (64 FR 63390). The agency is taking action contrary to its own program by requiring waste determined to be non-hazardous (by EPA's own exemption criteria) to comply with LDR treatment standards. The exemption criteria will be based on the risk of specific disposal scenarios (i e. risk-based). The model used will establish exemption levels which will determine that a particular wastestream will not pose an unreasonable risk if disposed in a solid waste landfill, as well as other disposal options. The application of LDR treatment standards to wastestreams which meet the exemption criteria misdirects industry resources towards the management of insignificant public health and environmental risks. Furthermore, LDR treatment standards are technology-based standards for hazardous wastes and are unrelated to the actual risk related to the waste; EPA is inappropriately mixing technology- and risk-based requirements. For the reasons stated above, GM believes that the application of LDR standards to an exempt waste as a condition to qualifying for an exemption is inappropriate, arbitrary and capricious, an abuse of discretion, and not in accordance with current law or regulations. GM requests that EPA remove proposed 40 CFR 261 3(g)(3) regarding LDR treatment standards from the proposal.

ICR9 & ICR4- CA Dept. of Toxic Substances Control, WH2P-00009, 2,5 State U.S. EPA is proposing an expansion of 40 CFR 261.3(a)(2)(iii) so that all wastes listed solely because they exhibit the ignitability, corrosivity and/or reactivity (I, C, R) characteristic would be exempt from hazardous waste regulation if they are de-characterized, and meet the appropriate

LDR treatment standards, including treatment for all underlying hazardous constituents. Currently, certain D001, D002 and D003 wastes are prohibited from being decharacterized by means of dilution in order to meet treatment standards. We want to ensure that it is U.S. EPA's intent that the proposed 29 listed wastestreams cannot be decharacterized by means of dilution. We believe these listed wastestreams and the D001, D002 and D003 wastestreams should be subject to the same Part 268 requirements, since the listed wastestreams are listed solely for one or more of the I, C, or R characteristics. DTSC believes that having like wastestreams comply with the same requirements will achieve regulatory consistency as well as protection of public health and the environment. [...]

ICR1 & ICR4 - Onyx Env. Services, WH2P-00015, 2,2 Waste Mgmt. Co. II. SPECIFIC COMMENTS. 1. Wastes Listed For Ignitability, Corrosivity, and/or Reactivity. OES supports the Agency's proposal to expand the mixture rule exemption to derived-from hazardous wastes which originally were listed for ignitability, corrosivity, and/or reactivity to the 29 hazardous waste codes listed in Table 1 of the preamble (64 Fed. Reg., at 63390) if they are de-characterized, and meet all applicable treatment standards in 40 CFR 268.40.

Technology-based LDR Standards for Wastes Listed for a Characteristic should be Re-evaluated

ICR5 - DoD, WH2P-00017, 7, 1 Federal Govt.

[...] However, DoD requests that the Agency re-evaluate the Land Disposal Restriction (LDR) standards for wastes with technology-specific treatment standards. Discussion. The current mixture rule allows wastes listed solely for ignitability, corrosivity, and/or reactivity characteristics to exit Subtitle C of RCRA, provided the waste is decharacterized and the appropriate LDR standards located in 40 CFR 268.40 are met. The additional requirement for these wastes to meet the 40 CFR 268 standards can be problematic because nineteen of the twenty-nine wastes listed for characteristics have technology-specific treatment standards rather than numeric standards. Consequently, the majority of the wastes listed for characteristics will not be eligible for the proposed exclusion because they will always require further treatment in RCRA Subtitle C facilities. This issue is of particular concern to Medical Treatment Facilities operated by DoD because they typically generate between 75 and 100 pounds per week of expired/unwanted pharmaceutical items that contain nitroglycerine as the sole active ingredient. These items, which include patches, tablets, syringes, and intravenous bottles, contain very low concentrations of nitroglycerine (less than 5 mg/ml) and have been decharacterized through the various manufacturing processes. However, EPA has stated that they are regulated as P081 when discarded (See 64 FR 63390 and comment #3 above). Under the exemption proposed in 64 FR 63390, these decharacterized wastes will be required to meet the 40 CFR 268 LDR standard for P081 waste. Since the standard for P081 non-wastewaters is treatment via combustion, chemical reduction, or chemical oxidation, these wastes will be unable to exit Subtitle C of RCRA. DoD requests that the Agency consider modifying the rule by incorporating one of the following changes: 1) Incorporate a provision that eliminates the LDR requirements for wastes listed solely for characteristics, provided they do not exhibit the characteristic at the point of generation. This LDR applicability concept is consistent with the proposed requirements for HWIR wastes that are found in the second portion of the rulemaking (64 FR 63403). This section states "wastes that have been shown to have met the HWIR exemption levels at the point of generation would be considered by EPA to have never been hazardous and, therefore, would have no LDR obligation". 2) Replace the existing P081 non-wastewater treatment standards with Deactivation (DEACT). This standard is currently required for several other wastes listed solely for reactivity, including K047, K045, and K044 wastes. In addition, DEACT is the required treatment method for five of the six D003 subcategories listed in 40 CFR 268.40 Recommendation. Incorporate one of the two options proposed by DoD, or provide some other mechanism for wastes with technology-specific treatment standards to qualify for the exclusion. Reference, 64 FR 63390 and 64 FR 63391

ICR5 - TRW, WH2P-00024, 8,1 Industry

Clarify BDAT for Reactive Wastes EPA has introduced a great deal of confusion into the LDR standards for reactive wastes by promulgating BDAT differently for different waste streams, all of which are classified as reactive. BDAT for all D003 streams is DEACT. BDAT for waste streams that are K-listed for reactivity only is also DEACT. However, BDAT for reactive-only P-and U-listed streams is a list of technologies. It would seem that DEACT would be the more appropriate standard for the Ps and Us in order to allow a wider variety of techniques to be used

to remove the characteristic and to be consistent with other reactivity-based listings. EPA should resolve this inconsistency in the LDR program through a rulemaking process.

# ICR6 Adding P105 into the Exemption

ICR6 - TRW, WH2P-00024, 2,2 Industry

EPA Should Address Inconsistencies and Defects in the P105 Listing and in the Official EPA Documents Supporting this Listing to Clarify the Basis of the Original Listing EPA's November 19, 1999 proposed rule identifies a set of listed hazardous wastes which were listed based on ignitability, reactivity, or corrosivity. The proposed rule then allows these listed wastes to be exempted from RCRA Subtitle C regulation if they no longer exhibit the characteristic for which they were listed under one of three situations: as generated, after mixing, or after treatment. In this proposed rule, EPA has not included P105 as one of those listed wastes covered by the proposed exemption even though a careful reading of the Listing Background Documents indicates P105 was listed exclusively on the basis of reactivity, not acute toxicity as stated in 40 CFR 261.33. TRW recommends that EPA clarify for the regulated community and for federal and state implementing agencies that sodium azide was listed for reactivity not acute toxicity and that P105 wastes are eligible for the benefits of proposed changes in the mixture and derived-from rules. The following history of the P105 listing is provided so that EPA can clarify that the listing is based on reactivity (and therefore would fall under this proposed modification to the mixture and derived-from rule). History of P105 Listing On December 18, 1978, EPA proposed to list as hazardous waste certain sodium azide materials based upon the classification of sodium azide by the Department of Transportation (DOT) as a Poison B substance. See 43 FR 58958 and 58962.1 EPA published the listing for certain sodium azide waste in interim final form on May 19, 1980. See 45 FR 33084. These sodium azide wastes were coded as P105 and identified as an acutely hazardous waste. See id. At 33124-33125. EPA finalized its P and U listings on November 25, 1980, referencing the Background Documents for EPA's specific rationale and data supporting each P and U listing. EPA promulgated its own criteria for what constituted an acutely toxic waste but EPA's criteria were virtually identical to the DOT classification of Poison B. (Note: EPA had published a Listing Background Document in April, 1980 and updated that document with a final Listing Background Document dated April, 1981.) A review of the Listing Background Documents indicates EPA based its listing of sodium azide on reactivity, not acute toxicity. EPA provided no data on acute toxicity for sodium azide. (Note: EPA did provide such data for other listings. See, for example, EPA Listing Background Document (April, 1981) entries for phosphine, thallium sulfate, and thiram.) Moreover, EPA no longer referenced the DOT classification of sodium azide as a Poison B, perhaps because there were no available data at the time to support either the Poison B or the EPA acute toxicity criteria. (Note: EPA had previously stated it would provide both review and citation of all such studies to ensure the chemical met the listing criteria. See, for example, EPA Background Document (April 30, 1980), p. 11. EPA provided no such information on sodium azide.) Rather, EPA indicated that sodium azide was explosive and that it was a commercial chemical product found on the TSCA Inventory of chemical substances. See Background Document (April, 1981), p. 48. Furthermore, sodium azide is not listed in 40 CFR Part 261, Appendix VIII even though EPA stated both in these early Background Documents and in later interpretive memos that all compounds listed for acute or chronic toxicity would be placed on Appendix VIII. There are further anomalies in EPA's regulation of sodium azide. Over time EPA has acted as if P105 were listed as an acutely reactive hazardous waste in contradiction to the published regulations. EPA's rulemakings since the time sodium azide commercial chemical product wastes were listed

as P105 in 1980 strongly indicate that the Agency views P105 as having been listed for reactivity. For example, the Background Document supporting the adoption of the land disposal restrictions for P105 indicates that the treatment standards applicable to P105 were designed to reduce the reactivity, rather than the toxicity, of sodium azide-related wastes. EPA referred to P105 as highly reactive or explosive and, for purposes of determining the applicable treatment standard, classified it as an incinerable reactive organic .2,3 EPA's failure to define sodium azide as a hazardous constituent for purposes of its 1995 proposed Hazardous Waste Identification Rule (HWIR) for process wastes further demonstrates that the Agency continues to justify the listing of sodium azide wastes on the basis of reactivity. See 60 FR 66344 (December 21, 1995). As part of the HWIR rulemaking, EPA proposed a risk-based standard for each of the toxic substances listed in Appendix VIII as the level below which wastes would no longer be regulated as hazardous waste. Significantly, no such level was proposed for P105. Had the Agency considered sodium azide to be hazardous due to its toxicity, it would have included sodium azide on its list of hazardous constituents for which a risk-based exit criterion would have been appropriate. Regulatory Implications of the Flawed P105 Listing These rulemakings, coupled with the flaws in the original listing described above, indicate that EPA itself is acting as if sodium azide was listed for reactivity rather than acute toxicity. TRW is not using this notice to suggest whether sodium azide could or should be listed for acute toxicity. Rather, TRW's position is that the current listing appears to be premised on reactivity and TRW should be allowed to take advantage of this proposed mixture and derived-from rule modification for P105 listed sodium azide waste. On the other hand, if EPA believes the listing as an acutely toxic waste is appropriate, TRW believes the Agency cannot rely on the listing in its current form. Rather, EPA should provide appropriate scientific support for the listing, take notice and comment on this information, and add sodium azide to Appendix VIII. 1. At that time, DOT Poison B substances were defined as substances that were either known to be so toxic to humans as to afford a hazard to health during transportation or were presumed to be toxic to humans based on animal oral, inhalation, or skin absorption data. The criteria were: (1) a rat LD50 of 50 mg/kg or less: (2) a rat LC50 of 2 mg/l or less; or (3)a rabbit dermal LD5O of 200 mg/kg or less. See 49 CFR 173.343 (October 1, 1978). 2. USEPA Office of Solid Waste; Background Document for Third Third Wastes to Support 40 CFR 268 Land Disposal Restrictions, Final Rule, Third Third Waste Volumes, Characteristics, and Required and Available Treatment Capacity; Vol. II; May, 1990; p. 3-334. 3. In fact, sodium azide is not an organic compound.

### ICR6 - TRW, WH2P-00024, 1,3 Industry

TRW's interest in the proposed rule includes understanding which listed hazardous waste streams are eligible for coverage under EPA's proposed amendments to the mixture and derived-from rules, as well as understanding how EPA will evaluate whether a characteristic has been removed in the absence of EPA-specified test methods. Both of these issues have significant implications for the management of sodium azide-containing wastes generated at our Mesa I and Mesa II facilities. This rulemaking offers EPA the opportunity to ensure these revised provisions of the mixture and derived-from rules are implementable and enforceable. It also provides EPA with the opportunity to clarify the basis for the P105 (sodium azide) listing. In summary, TRW recommends EPA undertake the following regulatory actions in the context of the November 19 proposal1: 1. Clarify that the P105 (sodium azide) listing was based on reactivity (explosivity)

and that sodium azide is therefore eligible for the proposed exemptions; 2. Consider whether special mixture and derived-from rules are appropriate for acutely toxic wastes; 3. Provide greater specificity in the definition of reactive hazardous wastes and flammable solid hazardous wastes so that the regulated community can self-implement EPA's proposed changes to the mixture and derived-from rules for characteristic waste with reasonable certainty; and 4. Clarify inconsistencies in the way BDAT has been promulgated for ignitable and reactive wastes. Each of these recommendations is discussed in detail below. 1. Promulgation of EPA's proposed mixture and derived-from rule changes without addressing TRW comments one and three would constitute lack of fair notice on how the proposed changes should be applied to TRW's wastestreams and would also be arbitrary and capricious. See In the Matter of Petro Processors, Inc., 1991 RCRA LEXIS 46, \* 14 (January 11, 1991) ( [background] documents are appropriately used to assist in the interpretations of the regulations they support ); also see In the Matter of R. R. Donnelley & Sons Company, 1996 RCRA LEXIS 24, \* 18-19 (December 16, 1996) (Where the background document does not support the characterization of the particular waste as hazardous, the generator may also use the background document as a shield against liability in an enforcement action.)

EPA must Provide Greater Specificity on the Regulatory Definition of Reactivity

## ICR7 - TRW, WH2P-00024, 6,1 Industry

Provide Greater Specificity in the Regulatory Definition of Reactivity The definition of reactivity has posed challenges for EPA since the beginning of the RCRA program. Most of the documents on the subject consistently state that existing test methods for reactivity are inadequate for waste matrices and the various waste management scenarios, that reactivity is both a relative and a subjective phenomenon, and that the varying aspects of reactivity can overlap with each other and with other characteristics making specificity in the definition difficult to achieve. (For example, the definitions of reactive and flammable solid can overlap.) See, for example, Background Document: Characteristic of Reactivity; May 2, 1980; p. 4-13 and 45 FR 33110, May 19, 1980. In addition, EPA has had to withdraw the provision of the reactivity characteristic that addresses DOT definitions, and has had to withdraw a guidance document and associated SW-846 test methods addressing cyanide and sulfide reactivity. See Michael to Wapensky; Feb. 24, 1995; 9443.1995(01) and Bussard to Love; Apr. 21, 1998; FaxBack 14177. TRW strongly supports EPA's proposed changes to the mixture and derived-from rule for reactive, corrosive, and ignitable listed waste. However, the vagueness and subjectivity of the reactivity definition pose particular problems. Without clarification on how EPA will apply the currently subjective narrative criteria, it will prove difficult or impossible for any generator to have sufficient certainty to take advantage of the provisions. A listing of some of these problems as encountered by TRW over the years is presented below. 1. Only the fifth reactivity criterion (40 CFR 261.23(a)(5)), cyanide and sulfide reactivity, incorporates a pH range into the definition. What pH level does EPA intend a generator to utilize when determining water reactivity for other potential water reactive wastes? 2. The fourth and fifth criteria (40 CFR 261.23(a)(4) and (5)) mention gases, vapors and fumes in a quantity sufficient to present a danger to human health or the environment. What is this level? Is it an OSHA PEL? Is it a TLV? Is it an IDLH? Is it an LD50 or LC50? Is it a NOAEL or LOAEL? Is it an LDLo or TDLo? Is it based on realistic exposure scenarios that are normally encountered at the generator's facility? Does it include consideration of realistic ambient conditions? Does it include utilization of personal protective equipment if that equipment is incorporated in standard facility operating procedures? 3. What is the Agency's position on wastes that are not reactive at the point of generation or after mixing or treatment but have the potential, under future management scenarios, to become reactive, e.g., by drying out? EPA has stated on two different occasions that the reactivity characteristic is not intended to capture wastes that could become reactive sometime in the future. See Background Document. Characteristic of Reactivity; May 2, 1980; p. 23 and MRQ Jan. 1983, 9443.1983(02). 4. What is the Agency's position on whether wastewaters can be water reactive according to the three water reactivity criteria in the regulations? The Agency asserts in the LDR treatment standards table at 40 CFR 248.40 and in the Background Document to the LDR rulemaking that D003 water reactive streams consist only of non-wastewaters. 5. What is EPA's position regarding whether reliance on DOT tests for explosivity and water reactivity is appropriate for RCRA reactivity classification? If they are not appropriate, why not? 6. How should a generator differentiate between certain reactive solids and flammable solids? Is it necessary to apply both classifications or is a single classification appropriate if there is only one distinct characteristic? TRW does not at this time

have specific technical recommendations on how to resolve each of these problems, due to the short time frame allowed for providing comments on this aspect of the proposed rule. This should not be interpreted as a lack of serious concern about these issues. TRW strongly encourages the Agency to work with the regulated community and other interested parties to resolve these issues. They impact not only the classification of waste streams as they are generated but also the ability of generators to determine compliance with EPA's proposed changes to the mixture and derived-from rule and compliance with LDR standards that dictate removal of the characteristic as BDAT.

ICR7 - Envirocare of Utah, Inc., WH2P-00011, 4,1 Waste Mgmt. Co. GENERAL COMMENT Envirocare notes that some hazardous waste characteristics are not well defined, i.e., reactivity for sulfide and cyanide. EPA has analytical methods for reactivity, but the corresponding standards for sulfide and cyanide, 500 mg/kg (ppm) and 250 mg/kg (ppm), respectively, are only interim guidance limits. EPA would do well to establish more defined standards for these hazardous waste characteristics in light of the proposed exemptions.

## ICR7 - ACIL, WH2P-00003, 2,1 Other

We are only commenting on one aspect of this proposed rule, namely, the laboratory test procedures performed to evaluate the characteristic of reactivity. We urge the agency to disallow the use of analytical test procedures published in Chapter 7 of SW-846 for determining reactive cyanide or sulfide. As noted in an April 28, 1998 memo prepared by David Bussard and Barnes Johnson of OSWER to EPA's National Enforcement Investigation Center on this topic: After this careful consideration, it is our conclusion that there were critical errors made in developing the guidance, that your concerns regarding the reliability of the guidance are well founded, and that the guidance should be withdrawn. This memo withdraws the July, 1985 guidance. A Federal Register notice announcing the withdrawal of the guidance from SW-846 will be prepared as soon as is feasible. We fully agree with the statements in this memo. It is generally accepted that the tests published in SW- 846 used to evaluate reactivity are invalid. Despite this fact, laboratories continue to perform the tests, because these tests are the only laboratory tests waste generators can use to evaluate reactivity. The laboratory community is thus obliged to perform a procedure which they know provides useless data. The Agency should provide better guidance about how to evaluate the characteristic of reactivity.

# ICR8 Inclusion of F003 Solvents in the Exemption

ICR8 - General Electric Corp., WH2P-00005, 1,3 Industry

[...] For example, GE supports the proposed revision, which would exempt F003 wastes once they no longer exhibit the characteristic of ignitability, which was the original basis for the listing. However, this proposed revision will have little effect beyond eliminating the derived- from rule for a small number of wastes. This is because current regulations already state that mixtures resulting from the commingling of listed hazardous wastes such as F003 (hazardous wastes listed only because they exhibit a characteristic) with solid wastes are regulated as hazardous wastes only if the mixture exhibits a characteristic. 40 C.F.R. 261.3 (a)(2)(ii). Moreover, if these derived-from residues are mixed with another solid waste and the resulting derived-from waste mixture no longer exhibits a hazardous characteristic, then that mixture is no longer regulated. (Of course, any such mixing is subject to the LDR dilution prohibitions.) Another reason why this proposed relief is minimal stems from the unique nature of how the majority of wastes are listed due to exhibiting a characteristic, namely F003 and a number of commercial chemical products. The most common derived from residual for F003, still bottoms, is also listed; thus, an exemption from the derived from rule for F003 which does not similarly exempt listed wastes has little practical meaning. [...]

### ICR8 - Maine DEP, WH2P-00028, 1,3 State

[...] Of particular concern in this regard is F003, because much of the waste is likely toxic as well as ignitable. As EPA acknowledged when it promulgated the listing, it is likely that F003 wastes contain other toxic contaminants. EPA states in 50 FR 53317 (December 31, 1985). In fact, solvents become spent when they have become contaminated with other materials, (i.e. heavy metals or toxic organic compounds) and must be disposed, reprocessed, or reclaimed. EPA further states . . . since spent solvents reasonably are likely to contain other toxicants at levels of regulatory concern, and since we have not evaluated those wastes for these toxicants, we believe it inappropriate to remove these solvents from the hazardous waste list. EPA goes on to suggest that site specific delisting petitions are the appropriate mechanism for those persons wishing to remove certain solvents from the listing. The solvents themselves may also be toxic, upon consideration of new data developed since 1985. For example, the National Toxicology Program, National Institutes of Environmental Health Sciences, Management Statistics Report dated January, 1999 concludes that under the condition of their 2 year inhalation studies, there is clear evidence of carcinogenic activity of ethylbenzene in male rats and some evidence of carcinogenicity in female rats and both sexes of mice. This data indicates that ethylbenzene (an F003 waste) has the potential for severe adverse effects that were previously unrecorded. Because of the recent data from NTP, Maine's State Toxicologist adjusted the Maine drinking water guideline for ethylbenzene downward to account for uncertainty about its potential for carcinogenicity. Extensive research of the toxicity of the solvents in F003 was not conducted, but ethylbenzene is one example of why ignitability is not the only characteristic to be concerned with. The Department supports EPA's position stated in 1985, and believes that for the same reasons it is inappropriate to include F003 in today's proposed rule. [...]

ICR2 & ICR8 - TXU Business Services, WH2P-00008, 1,3 Utility Co./Assn. However, if EPA does proceed with re-promulgation of the mixture and derived-from rules, the final regulation should exempt mixtures and derivatives of wastes listed as hazardous solely because they exhibit any of the characteristics of hazardous waste including the toxicity characteristic if the mixture no longer exhibits any of the characteristics. In addition, F003 wastes (spent non-halogenated solvents) should remain eligible for exemption from the rule.

## ICR8 - DOE, WH2P-00007, 6,3 Federal Govt.

EPA explains that, although F003 is listed solely for ignitability, its listing description also includes references to solvents that were listed for being toxic wastes. EPA requests comment on whether, for this reason, F003 should not be eligible for the exemption in proposed 40 CFR 261.3(g). DOE believes that F003 spent non-halogenated solvents, F003 spent mixtures of non-halogenated solvents, and F003 still bottoms from such spent solvents and mixtures should clearly be eligible for the exemptions in proposed 40 CFR 261.3(g), because these F003 wastes do not contain solvents listed for being toxic wastes. DOE further believes that F003 spent solvent mixtures/blends containing solvents listed for being toxic wastes (i.e., solvents in waste codes F001, F002, F004, and F005) should also be eligible for the exemptions in proposed 40 CFR 261.3(g), because the exemption requires that applicable LDR treatment standards must be met and the waste must not exhibit any hazardous characteristic at the point of disposal. In the case of an F003 spent solvent mixture/blend, the applicable LDR treatment standard includes treatment to reduce the concentration of each solvent in the mixture/blend to less than that solvent's universal treatment standard, as indicated in the table of Treatment Standards for Hazardous Waste in 40 CFR 268.40. DOE submits that this LDR treatment standard, in combination with the additional requirement of the exemption that the waste must not exhibit any characteristic of hazardous waste at the point of disposal, is equally as protective of human health and the environment as is treatment of a waste exhibiting any characteristic of hazardous waste to meet applicable LDR treatment standards. Accordingly, since LDR-compliant characteristic wastes may be managed in non-hazardous facilities, DOE believes F003 spent solvent mixtures/blends that meet the exemption requirements also could be safely managed in non-hazardous facilities. Hence, DOE supports eligibility of all F003 wastes for the exemptions in proposed 40 CFR 261.3(g).

ICR8 - USWAG, WH2P-00010, 4,4 Utility Co./Assn
If EPA proceeds with re-promulgation of the mixture and derived-from rules, F003 listed hazardous wastes should remain eligible for the exemptions.

ICR8 - USWAG, WH2P-00010, 10,2 Utility Co./Assn

F003 Wastes Should Remain Eligible for Exemptions from the Mixture and Derived-From Rules. EPA requests comment on whether F003 wastes should be eligible for the proposed exemptions from the mixture and derived-from rules. 64 Fed. Reg. at 63391. If EPA chooses to proceed with re-promulgation of the mixture and derived-from rules despite the arguments in section I of these comments, USWAG recommends that F003 wastes should remain eligible for the exemptions. As EPA correctly notes, even though the listing description for F003 includes references to solvents

that were listed for toxicity (rather than the toxicity characteristic), F003 is listed specifically for the characteristic of ignitability. That listing designation was the result of a comprehensive rulemaking that considered the specified spent solvents as well as mixtures of those solvents with the solvents included in the descriptions for F001, F002, F004, and F005 wastes. EPA determined that all wastes that fall within the scope of the F003 listing should be considered ignitable rather than toxic. The exclusion of F003 wastes from the mixture and derived-from rule exemptions would effect an inappropriate extension of the listing designation in this unrelated rulemaking.

## ICR8 - DoD, WH2P-00017, 9,1 Federal Govt.

Response to EPA's Section XXVI Request for Comments, Question Number 2 - Should EPA Allow F003 to be Eligible for the Proposed Expansion of the 40 CFR 261.3(a)(2)(iii) Exemption? Comment DoD supports including F003 in the proposed exemption from the derived-from rule provided by 40 CFR 261.3(g) for wastes listed solely because they exhibit the ignitability, corrosivity, and/or reactivity characteristics whether they are mixtures or residuals from treatment processes. Discussion. EPA is proposing to exempt from the derived-from rule (40 CFR 261.3(c)(2)(i)) those listed hazardous wastes that were listed for corrosivity, ignitability, or reactivity only. In the rule preamble (64 FR 63391), EPA asks for comment on whether to allow F003 (non-halogenated solvent) listed wastes to be eligible for the proposed exemption, considering that F003 wastes may contain ten percent or more of other listed halogenated or toxic solvent combinations. The F003 listing description can be considered to be four discrete categories: 1) those non-toxic, ignitable solvents specifically listed; 2) mixtures of only those non-toxic, ignitable solvents specifically listed; 3) mixtures of those non-toxic, ignitable solvents specifically listed and 10% of one or more of toxic solvents specifically listed in F001, F002, F004, and F005; and 4) still bottoms from the recovery of any of the above three categories. The exemption should clearly apply to the first two categories since they do not contain toxics. When toxics are present in the remaining two categories, they will be classified as F00l, F002, F004 or F005 in addition to F003, Therefore even when the waste is no longer F003, it will remain regulated as F001, F002, F004 or F005. Therefore a blanket exemption for all categories of F003 is appropriate because toxics, when present, will be adequately addressed under the other applicable waste codes. Recommendation. Provide an exemption to the derived-from rule for wastes listed only for ignitability, reactivity, or corrosivity, including F003 listed wastes. Reference. Request for comments 64 FR 63458, Section XXVI, Question #2 and 64 FR 63391, left-hand column.

ICR8 - Duke Power, WH2P-00022, 3,2 Utility Co./Assn.

If EPA proceeds with re-promulgation of the mixture and derived-from rules, F003 listed hazardous wastes should remain eligible for the exemptions.

ICR8 - Duke Power, WH2P-00022, 5,6 Utility Co./Assn.

III. F003 Wastes Should Remain Eligible for Exemptions from the Mixture and Derived-From Rules. EPA requests comment on whether F003 wastes should be eligible for the proposed

exemptions from the mixture and derived-from rules. 64 Fed. Reg. at 63391. If EPA chooses to proceed with re-promulgation of the mixture and derived-from rules despite the arguments in section I of these comments, Duke Power recommends that F003 wastes should remain eligible for the exemptions. As EPA correctly notes, even though the listing description for F003 includes references to solvents that were listed for toxicity (rather than the toxicity characteristic), F003 is listed specifically for the characteristic of ignitability. That listing designation was the result of a comprehensive rulemaking that considered the specified spent solvents as well as mixtures of those solvents with the solvents included in the descriptions for F001, F002, F004, and F005 wastes. EPA determined that all wastes that fall within the scope of the F003 listing should be considered ignitable rather than toxic. The exclusion of F003 wastes from the mixture and derived-from rule exemptions would effect an inappropriate extension of the listing designation in this unrelated rulemaking.

ICR8 - NY Dept. of Env. Conservation, WH2P-00048, 3,5

State
The Department agrees with this strategy, including for F003 spent solvents. If the solvent contained, before use, one or more F001, F002, F004, or F005 solvents, at 10% or more by volume, it should independently qualify for the appropriate other listing, which would still apply, even if the residual or mixture no longer exhibits ignitability.

ICR8 - Occidental Chemical Corp., WH2P-00046, 6,5 Industry F003 Listed Hazardous Wastes Should be Included in the proposed Exemption for wastes listed solely for characteristics of ignitability, corrosivity, or reactivity. EPA requests comment on whether to allow F003 listed hazardous wastes to be eligible for the proposed exemption, citing that "although F003 is listed solely for ignitability, its listing description includes references to solvents that were listed for toxicity as well" [64 FR 63391]. Our understanding of the hazardous waste determination requirements at 40 CFR 262.11(b) is that, if a generator determines that they have generated a waste which is listed as hazardous waste in Subpart D of 40 CFR 261, that the generator is obligated to identify the waste with all listed hazardous waste codes that apply to the waste. Specifically, with regard to EPA hazardous waste codes F001-F005, we understand that only the following mixtures/blends meet one or more of the spent solvent listings: solvent mixtures/blends containing, before use, 10% or more (by volume) of any of the solvents identified by the listing descriptions for F001, F002, F004 or F005, or any combination of any of the solvents identified by the listing descriptions for F001, F002, F004 or F005 that is greater than 10% (by volume); solvent mixtures/blends containing, before use, only the non-halogenated solvents identified in the listing description for F003; and solvent mixtures/blends containing, before use, any quantity of one or more of the non-halogenated solvents identified in the listing description for F003, and, a 10% or more (by volume) of any one or more of the solvents identified by the listing descriptions for F001, F002, F004 or F005. It follows, therefore, that only solvent mixtures/blends containing, before use, only the non-halogenated solvents identified in the listing description for F003 would be solely identified by EPA hazardous waste code F003. OxyChem and OVLP, therefore, believe that including F003 listed hazardous wastes within the list of hazardous wastes eligible for the proposed exemption is appropriate on the basis that F003 listed hazardous wastes do not present any attendant, unique risks to human health and the environment

that the Agency has not already considered in developing the proposed exemption. We also agrees that the majority of waste which would be eligible for this proposed exemption would be F003, and encourages the Agency to move forward at the earliest possible opportunity with this exemption to the derived-from rule.

ICR8 - Coalition of Responsible Waste Mgmt., WH2P-00045, 2,1 Other EPA specifically requested comments on whether F003 listed waste should be included because some of the solvents that are listed due to their ignitability characteristic could also be listed for toxicity as well. High-temperature incineration of organic compounds (especially ones listed due to an ignitability characteristic) will destroy those compounds. If those organic compounds no longer exist in the residual material, that material will not exhibit either the ignitability or the toxicity characteristic. Thus, the treatment for ignitability will also remove the toxicity characteristic. For this reason, CRWI supports including F003 in this exemption.

## ICR8 - DaimlerChrysler, WH2P-00042, 1,4 Industry

DCC also believes F003 is appropriate for inclusion as one of the 29 categories to be covered by this uniform exemption. F003 was properly listed for ignitability. Based on DCC's experience, the vast majority of F003 waste does not include F001, F002, F004 or F005. This is because many industries, including DCC, are either reducing or eliminating these wastes through pollution prevention and waste minimization programs. Although DCC believes F003 should be included within the exemption, as an alternative, F003 waste that passes TCLP for F001, F002, F004, and F005 constituents should qualify for the exemption.

## ICR8 - CMA, WH2P-00033, 16,2 Industry Assn.

F003 Listed Hazardous Wastes Should be Included in the proposed Exemption for wastes listed solely for characteristics of ignitability, corrosivity, or reactivity. EPA requests comment on whether to allow F003 listed hazardous wastes to be eligible for the proposed exemption, citing that "although F003 is listed solely for ignitability, its listing description includes references to solvents that were listed for toxicity as well". CMA supports including F003 in the proposed exemption and believes that the references in F003 to other solvents are not problematic. The F003 listing includes mixtures of an F003 listed solvent and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004 and F005. In a memo from Sylvia Lowrance to Joseph Gianetti, dated June 20, 1990, EPA stated that if the total of all F001, F002, F004, or F005 solvents before use is 10% or more by volume, the waste carries all applicable codes.2 This means that if a solvent mixture/blend, for example, contains, before use, 10% methanol (F003 solvent), 8% toluene (F005 solvent), 4% methyl ethyl ketone (F005 solvent) and 78% water it would be identified by EPA hazardous waste codes F003 and F005. Since the proposed exemption only covers waste listed solely for an ignitability, corrosivity, or reactivity this waste would not qualify for the proposed exemption. The Agency may also be concerned about spent solvent mixtures/blends containing, before use, any one or more of the solvents identified in the listing description for F003 and less than 10% (by volume) of any one or more of the solvents identified by the listing descriptions for F001, F002, F004 or F005 (e.g., 30%)

methanol, 4% toluene, 4% methyl ethyl ketone and 62% water). This waste would not be listed as an F003 waste since it would no longer meet the listing description for F003, i.e., it would not be a mixture of only solvents listed in F003 and it is not a mixture/blend of an F003 solvent and another solvent listed in F001, F002, F004, that is in the mixture in volumes greater than 10%. Thus, as described above, these type of spent solvent mixtures/blends would not meet any of the descriptions for listed hazardous waste codes F001-F005. Rather, the generator would be required to determine whether the spent solvent mixture/blend exhibited any of the characteristics of hazardous waste defined in Subpart C of 40 C.F.R. 261. As such, the fact that an F003 solvent is mixed with other solvents listed in F001, F002, F004, F005, does not affect the operation of the exclusion for F003 wastes. CMA, therefore, believes that including F003 listed hazardous wastes within the list of hazardous wastes eligible for the proposed exemption is appropriate on the basis that F003 listed hazardous wastes do not present any attendant, unique risks to human health and the environment that the Agency has not already considered in developing the proposed exemption. CMA also agrees with EPA that the majority of waste which would be eligible for this proposed exemption would be F003, and encourages the Agency to move forward at the earliest possible opportunity with this exemption to the derived-from rule.

## ICR8 - Ohio EPA, WH2P-00030, 5,3 State

Proposed Revisions to 40 CFR 261.3: How and Why is EPA Proposing to Revise the Hazardous Waste Identification Regulations for Mixtures and Derived-From Wastes? 1. Request for Comment: U.S. EPA requests comment on whether F003 spent solvents and spent blends should be eligible for the proposed exemption from the derived-from rule since F003 spent solvent blends may contain toxic solvents listed under F001, F002, F004 and/or F005. Comment: Ohio EPA believes that all spent solvents and solvent blends meeting the listing description for F003 should be eligible for the proposed exemption from the derived-from rule. Any toxic solvents contained in an F003 spent solvent blend will not escape proper treatment because of the land disposal restrictions (LDR) program. Our reading and interpretation of the F003 listing description is that spent solvents and solvent mixtures/blends carrying only the F003 waste code will not contain toxic solvents. Solvent mixtures/blends, meeting the F003 listing description and containing a certain percentage of toxic solvents will also carry the waste code F001, F002, F004 and/or F005 and therefore, be subject to treatment requirements under the LDR program. Per the listing description, a hazardous waste carrying solely the F003 waste code will contain only one or more of the following solvents xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and/or methanol (i.e. specified F003 solvents). All of these solvents are listed hazardous waste because they only exhibit the characteristic of ignitability. Therefore, the spent solvent or solvent blend will not be a waste that contains a toxic solvent listed under the F001, F002, F004, and/or F005 waste codes. A solvent blend containing one or more of the specified F003 solvents and ten percent or more by volume of one or more of the toxic solvents listed in F001, F002, F004 and/or F005 will carry more than the F003 waste code. The waste will be designated F001, F002, F004 and/or F005 in addition to F003. This occurs due to the specifics of the listing descriptions for F001, F002, F004 and F005. It is not due to the specifics of the F003 listing description. Therefore, even if the waste is decharacterized to remove the ignitability characteristic, the waste code for the toxic solvent constituent will remain applicable to the waste. The waste will still carry a listed waste code and be subject to regulation

and treatment under the hazardous waste program. It is important to note that spent solvent blends consisting of the specified F003 solvents and less than ten percent of one or more of the toxic solvents listed in F001, F002, F004, and/or F005 will not be defined as a listed hazardous waste. Such a mixture/blend meets none of the spent solvent listing descriptions. It is regulated under RCRA only if it exhibits a hazardous waste characteristic. From the short discussion in the preamble, we suspect that these are the spent solvent blends/mixtures you are concerned as to whether they should be included in the exemption from the derived-from rule. However, this is irrelevant because these solvent blends/mixtures are not designated F003 because they do not meet the F003 listing description.

ICR8 - CA Dept. of Toxic Substances Control, WH2P-00009, 2,5

[...] U.S. EPA is proposing to exempt wastes which are hazardous solely because they exhibit the characteristic of I, C, or R and requests comment on whether F003 should be included in this exemption. The listing description of F003 contains wastes that are listed for toxicity. Therefore, ignitability is not the only characteristic of concern. For this reason, DTSC believes that F003 wastes should not be eligible for this exemption. We fear that allowing F003 to be eligible for the exemption would open the door for other listed wastes (which are listed due to toxicity) to escape regulation.

## ICR8 - ETC, WH2P-00034, 4,4 Waste Mgmt. Assn.

With regard to the F003 code, the ETC is particularly opposed to eliminating the derived-from rule once this waste no longer exhibits the ignitability characteristic. As EPA states on page 63391, the listing description for F003 does include other solvents that were listed for toxicity as well. In addition, the main non-halogenated solvents associated with F003 waste include toxic constituents like ethyl acetate and ethyl benzene. EPA notes on page 63448, as part of the economic impact analysis, that there have been 51 different hazardous constituents associated with the F003 waste code. EPA has done no assessment of the toxicity of these constituents and the risks associated with allowing F003 waste to be included in this exemption. All 51 of these constituents must be evaluated, as well as all of the solvents associated with the F001 to F005 listing. If EPA lacks toxicological data on any of these constituents, then F003 cannot be eligible for the exemption once the ICR characteristic is removed.

ICR8 - Onyx Env. Services, WH2P-00015, 2,3 Waste Mgmt. Co. Additionally, the Agency requests whether F003 which include solvents listed for toxicity should be eligible for this proposed exemption. OES believes all F003 wastes should be eligible for the exemption because the wastes will still need to meet all applicable land disposal restriction standards.

ICR8 - State of Kentucky, WHWP-00206, 6,5 State Govt.

In the April 30, 1992 proposal to revise the Hazardous Waste Identification Rule, 25 constituents were identified as potentially toxic despite their current listing as characteristically hazardous only. For example, acetone had been determined to be toxic and/or carcinogenic and the agency was considering whether to add it to the list of hazardous constituents. The Agency was considering a separate rulemaking to modify the basis for listing F003 and U002. The current

HWIR proposal appears to have ignored the Agency's determination that these 25 chemicals were hazardous because of toxicity and/or carcinogenicity. If these chemicals are either toxic or carcinogenic according to the Agency's own determinations, they should be identified as such in 40 CFR 261 Subpart D.

ICR8 - Pioneer Americas, WH2P-00036, 2,5

Industry

EPA requests comment on whether F003 wastes should be eligible for this exemption, since the listing description for F003 includes solvent mixtures of those specifically listed F003 solvents with solvents listed under F001, F002, F004, and F005 which were also listed for toxicity. Pioneer believes that F003 wastes which contain only those listed F003 solvents whose listing criteria was ignitability should be eligible for the exemption, as they meet all the same criteria as the other wastes EPA proposes to exempt. Those F003 wastes which also contain solvents under F001, F002, F004, and F005 which have been listed for toxicity should not be eligible for this revision. EPA could word the eligibility for F003 wastes in this revision to read only those F003 wastes which do not contain solvents listed under F001, F002, F004, or F005.

# ICR9 Dilution Prohibition should Apply to these Exempted Wastes

ICR9 & ICR4- CA Dept. of Toxic Substances Control, WH2P-00009, 2,5 State U.S. EPA is proposing an expansion of 40 CFR 261.3(a)(2)(iii) so that all wastes listed solely because they exhibit the ignitability, corrosivity and/or reactivity (I, C, R) characteristic would be exempt from hazardous waste regulation if they are de-characterized, and meet the appropriate LDR treatment standards, including treatment for all underlying hazardous constituents. Currently, certain D001, D002 and D003 wastes are prohibited from being decharacterized by means of dilution in order to meet treatment standards. We want to ensure that it is U.S. EPA's intent that the proposed 29 listed wastestreams cannot be decharacterized by means of dilution. We believe these listed wastestreams and the D001, D002 and D003 wastestreams should be subject to the same Part 268 requirements, since the listed wastestreams are listed solely for one or more of the I, C, or R characteristics. DTSC believes that having like wastestreams comply with the same requirements will achieve regulatory consistency as well as protection of public health and the environment. [...]

EPA Should Assess the Potential Health and Environmental Impacts of the Expanded Exemption

### ICR10 - Maine DEP, WH2P-00028, 1,3

State

[..] EPA must carefully evaluate the properties, especially the toxicity, of the 29 compounds proposed to be excluded. Some of these wastes are acutely hazardous and merit a thorough review to ensure that the exclusion is appropriate and that they in fact are only characteristic wastes. EPA's responsibility in this regard is analogous to its obligation under Section 3001 (f) of RCRA.

## ICR10 - ETC, WH2P-00034, 4,1 Waste Mgmt. Assn.

[...] EPA's Hazardous Waste Characteristics Scoping Study (Nov. 15, 1996) identified numerous gaps in the current RCRA identification of characteristic wastes. The gaps are so serious that EPA should not be proposing to eliminate any listing which was based on a characteristic until the deficiencies identified in the 1996 Scoping Study are fully addressed. Sections 3.1.2 and 3.2 of the Scoping Study identify numerous gaps that create risks associated with physical hazards that are not addressed by the current ICR criteria or testing methodology. These include the lack of coverage of corrosive solids, the exclusion of combustible liquids and non-liquids with low flash points, inadequacies in the test procedure for reactivity, and the fact that pH is not a complete indicator of corrosivity. These gaps in the tests for the underlying physical hazards of ICR wastes present major risks of exposure and releases of hazardous chemicals. EPA should not be allowing any ICR listed wastes to exit the system until these gaps are addressed with more complete ICR criteria and tests. In addition, Sections 3.1.3 through 3.1.5 of the Scoping Study discuss the fact that the ICR characteristic does not address the toxicity of the underlying hazardous constituents in these wastes, and the potential damage that could result to groundwater and surface waters resulting from the toxicity of the underlying hazardous constituents. At least in the case of the listed waste, there are hazardous constituents that are identified with corresponding LDR treatment standards in Part 268 to minimize threat to human health and the environment. EPA must not eliminate any listing once the characteristic is removed, because the underlying hazardous constituent still represents a substantial threat even after LDR treatment. In proposing to eliminate the 29 listed wastes once the ICR characteristic is removed, EPA has not provided any evaluation of the hazardous chemicals that are associated with these waste codes. All of the hazardous constituents associated with these codes must be evaluated. If EPA lacks toxicological data on any of the constituents, then the corresponding waste code cannot be exempted, even if the ICR physical hazard is eliminated.

## ICR10 - ETC, WH2P-00034, 5,1 Waste Mgmt. Assn.

The economic benefit associated with exempting the 29 ICR listed waste codes was estimated by EPA at \$4.6 million nationwide (see page 63448). Yet EPA has done no evaluation of the negative environmental impact associated with eliminating these codes. As EPA notes in proposing to maintain the mixture and derived-from rules, many Superfund sites and damage cases are associated with the disposal of waste residues that contain substantial levels of toxic constituents. This is true also of these 29 ICR listed waste codes, and damages could result from the hazardous constituents still present in these waste. The concentrations can be low enough to not exhibit an

ICR type of physical hazard, yet high enough to cause environmental damage. One damage case or Superfund site can cause far in excess of the \$4.6 million estimated savings predicted by EPA. The elimination of these 29 waste codes is therefore not justified economically, and EPA is not justified in going forward with this action since the potential health and environmental impact costs have not been assessed.

# ICR11 EPA should Encourage States to Adopt the Changes

ICR11 - General Electric Corp., WH2P-00005, 18,1 Industry
GE Urges EPA to Quickly Finalize the Proposal with Our Requested Changes and Encourage
States to Adopt It Subject to the proposed changes detailed above, the proposal offers a down
payment on long promised relief, and GE urges EPA to finalize the proposal with the requested
changes as quickly as possible. However, regardless of EPA's progress on these issues, little will
change in the business world until the States adopt a final rule. GE urges EPA to work closely with
the States to encourage adoption of these amendments as soon as possible. It is also important to
provide enforcement discretion between the time a State adopts the new rule and is authorized for
it under the RCRA program.

## ICR11 - NEDA RCRA, WH2P-00012, 2,2 Industry Assn.

Although the proposed change likely will offer little meaningful relief (unless coupled with CMA's proposed changes), the revisions are a step in the right direction. Consequently, NEDA RCRA urges EPA to finalize the proposal quickly. However, the key to implementation of these changes is whether RCRA-authorized states adopt the revisions. NEDA RCRA thus urges EPA to encourage adoption of these amendments as soon as possible by RCRA-authorized states.

EPA should Increase Funding to the States which Adopt these Changes

### ICR12 - Missouri DNR, WH2P-00025, 2,1 State

As discussed in section XXIII of the preamble, the proposed revisions would not go into effect in authorized states, such as Missouri, until we adopt the revisions and receive authorization from EPA for the revision to our state regulations. Further, because the revisions would be less stringent, we would not be required to modify our state program. However, as has been the case in the past when EPA adopts revisions to the RCRA regulations that are less stringent, states are strongly influenced by both EPA and the regulated community to adopt the revisions without modification. For that reason, we believe it is necessary to offer our comments and share our concerns. Our comments primarily address sections V to XIV of the preamble published with the proposed rule. We would also like to point out that the proposed rule would place a significant new burden on inspection and enforcement personnel, particularly at the state and local government level. Implementing this proposed rule without providing additional funding for inspection and enforcement will result in fewer inspections and enforcement actions, a lesser overall enforcement presence, and a lower compliance rate less protective of human health and the environment. We also anticipate that the budget for laboratory analysis required to test an exempt waste stream will increase exponentially with the proposed rule. If this proposed rule is adopted, we strongly recommend that EPA increase funding to the states to account for the additional duties and laboratory expenses necessary to implement the rule.

Text of the Mixture Rule does not Currently Exclude Wastes Listed for Specific Toxic Chemicals from becoming Exempt once those Chemicals are below TC Levels

## ICR13 - Kentucky NREP, WHWP-00206, 6,2 State

The discussion of the limitations of the mixture rule and its applicability to characteristically ignitable, reactive or corrosive wastes only is very interesting. The text of the mixture rule does NOT exclude the use of the TCLP test (or the old EP toxicity test) for wastes that are listed for the specific toxic constituents. For example, F035 is listed on the basis of arsenic, chromium and lead; in the past, Kentucky would have allowed an exemption under the mixture rule that allowed this waste to be regulated as solid waste if it no longer failed the TCLP/EP toxicity test. Although the interpretation offered in the preamble is interesting, it does not reflect the text of the regulatory language (see 40 CFR 261.3(a)(2)(iii)) since the regulatory language states ". . . hazardous waste that is listed in [40 CFR Part 261] Subpart D of this part solely because it exhibits one or more of the characteristics of hazardous waste identified in [401 CFR Part 261] Subpart C... ". It is recommended that this language be clarified in the regulation itself to clarify that the toxicity characteristic is not to be considered applicable to mixtures.

EPA Should Clarify Whether Discarded Nitroglycerine Patches are P081 Hazardous Waste

### ICR14 - NY DEC, WHWP-00245, 1,2 State

EPA proposes to make the "derived-from" rule consistent with the "mixture" rule, in that materials derived from a listed hazardous waste that is listed solely because it exhibits a characteristic would not be subject to any regulation under Subtitle C of RCRA, including land disposal restrictions (LDRs), unless it also exhibits the characteristic. Presently, such derived-from wastes and residues are still subject to LDRs, even if they do not exhibit the characteristic. DEC supports this proposal, but there is a related problem which needs to be addressed in much the same manner. Certain commercial chemical products, listed solely because they exhibit a characteristic, are sometimes found in product formulations in which the concentration of the sole active ingredient is low enough that the formulation does not exhibit the characteristic for which the active ingredient was listed. If these formulations do not exhibit the characteristic at the point at which they first become solid wastes, they should not be regulated in any way under Subtitle C. Nitroglycerin patches are an example. According to current guidance from EPA, when nitroglycerin patches outlive their shelf life and become solid wastes, they are considered to be a listed hazardous waste (P081), even though the nitroglycerin content is too low to exhibit reactivity, the characteristic for which nitroglycerin is listed. To regard this material as not only a hazardous waste but an acute hazardous waste is completely inappropriate and adds nothing to the protection of human health and the environment. Wastes that are listed solely because they exhibit a characteristic should not be considered hazardous wastes if they do not exhibit the characteristic at the point of generation.

### ICR14 - DoD, WH2P-00017, 6,1 Federal Govt.

Whether Products Containing Non-Reactive Concentrations of Chemicals and Which are Listed Solely for Reactivity are Regulated as Hazardous Waste When Discarded Comment. DoD requests clarification regarding whether discarded products that contain chemicals listed solely for reactivity, but which are not sufficiently concentrated to exhibit any characteristic, are hazardous waste. We believe the proposed rule contains an inconsistency in the discussion of nitroglycerin patches. We request clarification regarding patches and other types of non-reactive wastes such as nitroglycerin pills. Discussion. In section IV of the proposed rule, EPA makes the statement "... nitroglycerine patches, which when used for medical purposes are not reactive even at the point they are manufactured, but are regulated as P081 when discarded." This interpretation is not consistent with guidance provided in the April 1995 Monthly Hotline Report. The report, which is available at http://www.epa.gov/epaoswer/hotline/95reportl04\_95mhr.txt (question #2), states "Unused discarded nitroglycerine patches are not classified as P-listed hazardous waste... Although nitroglycerine may be the only chemically active component of a medical patch, a nitroglycerine patch is considered a manufactured article, similar to mercury containing thermometers, not a commercial chemical product. EPA did not intend for the phrase "commercial chemical product" to apply to manufactured articles like medical patches that contain a chemical listed in section 261. 33." In addition to not applying to manufactured articles, P081 should not apply to waste that is not reactive at the point of generation. This is because the listing description for P081 includes an "(R)". This implies that it is limited to waste exhibiting this characteristic.

DoD believes it would be appropriate for the Agency to address this issue in the Federal Register when the final rule pertaining to the mixture and derived-from rules are promulgated. Recommendation. DoD recommends that the Agency modify their interpretation stated in 64 FR 63390, or provide supporting rationale for the statement regarding why non-reactive patches would be regulated as P081. EPA should also clarify whether waste must exhibit the characteristic for which it was listed in order to meet the listing description.

ICR14 - NY Dept. of Env. Conservation, WH2P-00048, 4,1 State

One other refinement to this amendment is also appropriate. Occasionally, as in the case of nitroglycerine patches, wastes (not residues or mixtures) meeting the listing descriptions do not exhibit the indicated characteristic at the point of generation. If that is the case, they should not be considered hazardous wastes and LDRs should never attach. This is consistent with EPA's proposed strategy for wastes meeting HWIR exit levels at the point of generation.