Appendix A: Full Text of Comments from 1995 and 1999 HWIR Proposals on Retaining the Mixture and Derived-From Rules

MDF1 - CMA, WHWP-00073, 20, 1 Industry Assn.
EPA Has Not Satisfied the Requirements of the 1992 Appropriations Rider. The Mixture and Derived-From Rules Remain Invalid 1. The Appropriations Rider Requires EPA to Promulgate Meaningful Revisions to the Mixture and Derived-From Rules Alarmed by the 1992 HWIR proposal, environmental groups and states succeeded in getting Congress to enact the Appropriations Rider, blocking the proposal for at least a year. The Rider added, however, that "EPA shall promulgate revisions to [the mixture and derived-from rules] by October 1, 1994." Pub. L. No. 102-389, 106 Stat. 1571, 1602-03 (1992). EPA's failure to comply with the Appropriations Rider led to the lawsuit that currently governs its actions in this rulemaking (Environmental Technology Council v. Browner, No. 94-2119, D.C. Cir.). The proposal clearly evinces the view that it "revises" the mixture and derived-from rules within the meaning of the Appropriations Rider. See, e.g., 66348 ("the revisions proposed today"). In fact, however, apart from making cross-references to the new exit subsections, the proposal makes no changes to these rules 1/. The only "revisions" proposed to be made are the HWIR exit mechanism, which [provides] virtually no relief to anyone. As a practical matter, therefore, EPA has not revised the mixture and derived-from rules in any meaningful way. As the Agency correctly notes, the Mobil Oil decision concluded that the Appropriations Rider "prevented both EPA and the courts from withdrawing or terminating the [current] interim rules before EPA revised them, even if EPA failed to meet the statutory deadline for the revisions." 66347 (citing Mobil Oil Corp. v. EPA, 35 F.3d 579, D.C. Cir. 1994). The decision expresses no opinion, however, about the consequence of EPA taking final agency action that fails to "revise" the rules, as required by the Appropriations Rider. (The decision assumed that they "will be replaced by new rules by [October 1, 1994]." 35 F.3d at 583.) Nor does it opine on the substantive validity of the current rules; indeed, it avoided that question by dismissing it as moot. If the proposal is finalized in its current form, EPA will have accomplished two things. First, it will have failed to satisfy the Appropriations Rider. Second (and this is true no matter what form the HWIR exit rule takes), the Agency will have put in play once again the substantive validity of the mixture and derived-from rules. Once the "stay" created by the Appropriations Rider has been lifted by final agency action in response to it, the rules themselves will again be subject to challenge as being inconsistent with RCRA Section 3001. 2. The Mixture and Derived-From Rules Remain Invalid It emphatically has been, and will continue to be, CMA's goal to offer EPA technical assistance directed toward development of an exit rule that provides meaningful relief from the mixture and derived-from rules. As a practical matter, the more meaningful that relief is, the less concerned CMA will be about the validity of those rules. Indeed, the more effectively the exit rule exempts low-risk wastes from the rules, the more defensible they will be. At present, however, EPA has not offered a satisfactory basis for sustaining the rules, even as it proposes to instate them for the third time. The proposal offers three bases for the rules, each of which is insufficient. RCRA Sections 3002-3004 Do Not Authorize the Rules The proposal first offers, in barely veiled fashion, the "continuing jurisdiction" theory that has been rejected even by the Agency's own Environmental Appeals Board, as well as by the Seventh Circuit. 66348 (referring to EPA's "decision to retain jurisdiction over major portions of the universe of waste mixtures and treatment residues"); see United States v. Bethlehem Steel Corp., 38 F. 3d 862, 871 (7th Cir. 1995) (rejecting "continuing jurisdiction" theory as basis, or

substitute, for mixture rule); In re Hardin County, OH, RCRA (3008) Appeal No. 93-1, slip op. at 12-16 (EAB April 12, 1994 (same). In fact, the continuing jurisdiction theory conflicts with the preamble's earlier statement that, without the mixture and derived-from rules, persons managing wastes "could potentially evade regulatory requirements by mixing listed hazardous wastes with other . . . NonHazardous solid wastes . . . or minimally processing or managing a hazardous waste . . . ." (60 FR 66346). Whether mixtures of listed wastes and solid wastes are hazardous is a question of waste identification, as the caption of the instant rule recognizes, and is governed by Section 3001 of RCRA. Sections 3002-3004, cited by the proposal, allow EPA to regulate generators, transporters and facilities that treat, store and dispose of previously identified "hazardous wastes" 2/. Those sections do not address the identification of "hazardous wastes," and thus do not confer any authority on EPA to identify hazardous wastes 3/. Since the mixture and derived from rules serve solely to identify hazardous wastes, and do not address their subsequent management, they cannot be based on Sections 3002-3004. The Rules Are Not Valid Class Listings Next, the proposal contends that "[t]he mixture and derived-from rules are also valid exercises of EPA's authority to list . . . classes of hazardous wastes when it has reason to believe that wastes in the class are typically or frequently hazardous." (60 FR 66348) This argument is no more valid now than when it was first advanced in the Mobil Oil litigation, as a post-hoc rationalization for the current interim rules. First, the mixture and derived-from rules are not waste listings at all -- they are a mechanism for (improperly) extending existing waste listings. This is evident from their very place in the hazardous waste regulations: they do not appear in 40 C.F.R. Part 261, Subpart D, "Lists of Hazardous Wastes," but instead are located in the "General" provisions of Subpart A. Second, there is simply no support for concluding that mixtures or treatment residues "typically or frequently" pose a substantial hazard, as required under the regulatory definition of class listings, 40 C.F.R. para. 261.11(b). EPA's own longstanding practice is that, in a class-wide listing determination, "typically or frequently" means that over 50 percent of the samples taken from that class exhibit some or all of the Section 261.11(a) criteria. See, e.g., 56 Fed. Reg. 48020 (Sept. 23, 1991) (supplemental proposal not to list as hazardous the class of used oil destined for disposal); 45 Fed. Reg. 33114 (May 19, 1980) ("a class of wastes may be listed generically so long as most of the wastes in the class" are hazardous) (emphasis added). Moreover, EPA historically has required that samples of a waste class contain concentrations of toxic constituents at 100-1000 times specified health-based numbers to be considered as posing a "substantial hazard" under Section 261.11(a) (3). See, e.g., 56 Fed. Reg. 48018 (Sept. 23, 1991); see also 57 Fed. Reg. 21453 (May 20, 1992) (EPA generally requires that wastes typically and frequently contain toxic constituents at "many times" health-based levels and that such constituents be mobile and persistent). The current proposal makes no reference to these prior practices, nor does it offer evidence that the Agency collected or analyzed any samples or otherwise attempted to demonstrate that 50 percent -- or any substantial percentage -- of mixtures or treatment residues met any of the specific criteria of Section 261.11(a). Instead, the proposal merely asserts EPA needn't "prove that every member of a class poses a hazard." 66348. Indeed it need not, but the proposal fails to show that waste mixtures are even hazardous half the time. The proposal also offers nothing responsive to the 100-1000 times health-based numbers requirement. In another connection, the proposal states that EPA concluded in 1980 that "the hazardous constituents contained in these wastes are not generally eliminated or rendered nontoxic simply because a waste is mixed with other wastes or managed in some fashion." Id. Such a broad statement is insufficient to support a class listing for at least two reasons. First, it clashes with the regulatory

impact analysis' conclusion that the generic exit rule could exempt 64.4 million tons of listed wastes or their treatment residuals. (60 FR 66415) (This statement confirms EPA's prior admissions that millions of tons of mixtures and residues covered by the rules actually pose little or no risk). E.g., 57 Fed. Reg. 21451, 21453. Second, it stands in stark contrast to the detailed technical analyses in recent hazardous waste listing decisions for broad waste classes such as used oil destined for disposal. E.g., 57 Fed. Reg. 21528-31 (May 20, 1992); 56 Fed. Reg. 48006-20 (Sept. 23, 1991). The proposal asserts that the administrative record for the 1992 HWIR proposal demonstrates that such mixture and derived-from wastes may be "typically or frequently" hazardous (66348), but this claim was revealed in the Mobil Oil litigation to be a vast overstatement. Many of those documents are based on isolated data collected for purposes completely unrelated to determining whether mixtures and treatment residues typically or frequently pose substantial hazards. See, e.g.,Doc. No F-92-MDIF-SOOOI, 50002, 50004 4/. Further, most of the data in the record documents was already outdated and of dubious relevance or value by 1992. See, e.g., Doc. No. F-92-MDIF-50003 (data from 1980 rulemaking), D-2289 (1971 newspaper article on dioxins), D-2356 (1980 hazardous waste listing background document, itself based on data collected in the 1970's). CMA seriously questions whether such old data is still relevant or in any way representative of mixtures and residues as generated and managed in 1996, since many processes which generated mixtures and residues before 1980 no longer exist, and since the minimal regulatory system under which such wastes were managed in that era bears no resemblance to the comprehensive controls in place now. Cf. 66396 ("[S]ignificant changes and improvements in waste management have occurred since the early 1980s. . . . [I]ndustries have gained experience in managing wastes and many have improved waste management practices . . . ."). Finally, to list a class or category of wastes as hazardous, the class itself must have "sufficient uniformity" to enable EPA to rationally apply the Section 261.11(a) criteria to the members of that class and to determine whether they are typically or frequently hazardous. 45 Fed. Reg. 33114 ("[t]he Agency . . . must demonstrate that sufficient uniformity exists or is likely to exist.") The preamble strongly suggests the opposite: "[I]t would be virtually impossible to try and identify all possible waste mixtures and treated wastes . . . ." 66348. Thus, there is not "sufficient uniformity" among the countless combinations of wastes covered by the mixture and derived from rules to justify listing such wastes as a class in accordance with Section 261.11(a) and (b). For all the foregoing reasons, CMA believes that the mixture and derived-from rules remain unauthorized by RCRA, particularly in the absence of a meaningful exit program. We strongly urge EPA to revise the current proposal to create such a program. 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. 2/ The decisions cited in the preamble do not support the proposition it asserts. Rather, they deal with EPA's limited authority under certain provisions of RCRA to continue to regulate the handling of wastes previously identified as hazardous (Chemical Waste Management, Inc. v. EPA, 976 F.2d 2, 8 (D.C. cir. 1992) and Shell Oil Corp. v. EPA, 950 F.2d 741, 754-55 (D.C. Cir. 1991)) or the regulation of hazardous waste sites (e.g., Chemical M'frs Ass'n v. EPA, 919 F.2d 158, 162-164 (D.C. Cir. 1990)). They do not deal with the question of whether mixtures and treatment residues should be classified as hazardous, and subject to the

provisions of Subtitle C, in the first place. 3/ RCRA Section 3001 provides exclusive authority -- as well as the specific instructions -- for the identification of hazardous wastes. See Shell Oil, 950 F.2d at 747. Where Congress provides such explicit instructions, an agency cannot rely upon more general statements of authority (such as sections 3002-3004) to exceed or deviate from more specific statutory requirements. See, e.g., Board of Governors of the Fed. Reserve Sys. v. Dimension Financial Corp., 474 U.S. 361, 373 n.6 (1986); AT&T v. FCC, 487 F.2d 865, 872-81 (2d Cir. 1973). See also HWTC v. EPA, 876 F.2d at 276-77. 4/ For example, Doc. No. F-92-MDIF-SOOO1 consists of an EPA attorney's review of a 1989 "preliminary data summary" by EPA's Water Office for the tentative purpose of imposing Clean Water Act standards on hazardous waste treatment industry. Neither that attorney's conclusion that certain derived from wastes (i.e., leachate and incinerator scrubber water) can contain high levels of toxic constituents, nor the data on which it is based, even approach the evaluation of technical criteria required by Section 261.11(a). [...]

MDF1 - CMA Water Additives Panel, WHWP-00074, 4, 3 Industry Assn.
The Panel [continues] to question the legality of the "mixture and derived-from rules," 40 C.F.R. Sections 261.3(a)(2)(iv), 261.3(c)(2)(i), which are being reproposed in the HWIR proposal. 60 Fed. Reg. 66,344, 66,440 (1995). These comments contain a summary of more detailed comments on the mixture and derived-from rules that are being submitted by the Chemical Manufacturers Association. The mixture and derived-from rules will continue to apply to wastes that will not be able to exit the Subtitle C regulatory system via the HWIR. While EPA claims that the proposed HWIR will "reduce any overregulation of low-risk wastes captured by the mixture and derived-from rules," 60 Fed. Reg. at 66,346, many wastes, such as wastewater treatment sludge containing acrylamide, will not be able to exit the system. As a result, many wastes that pose insubstantial, if any, risk to human health and the environment will continue to be unnecessarily subject to regulation as a hazardous waste. For example, sludge containing acrylamide, as well as mixtures of such sludge with other wastes, may have to be managed as a hazardous waste even though they pose no appreciable risk. By indiscriminately proposing the mixture and derived-from rules, the Agency is exceeding its statutory and regulatory authority and identifying wastes as hazardous without regard to whether they pose a "substantial" present or potential hazard to human health or the environment, as is required by RCRA. 42 U.S.C.A. Section 6904(5) (West 1995). The Agency claims authority for the mixture and derived-from rules from sections 3002-3004 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C.A. Sections 6922-24, which direct regulation of hazardous wastes until they no longer pose a hazard to the public. 60 Fed. Reg. at 66,348. These sections of RCRA mandate hazardous waste management standards for generators, transporters, and treatment, storage and disposal facilities -- not standards for identifying hazardous wastes. Waste identification is unambiguously covered in section 3001. 42 U.S.C.A. Section 6921. Indeed, in previous promulgations and in litigation, EPA relied primarily on section 3001 for justification of the rules. Next, EPA claims authority for the mixture and derived-from rules from section 3001 of RCRA. 60 Fed. Reg. at 66,348. The Agency, however, has not followed the required procedures or made the findings required by RCRA to identify "mixture and derived-from wastes" as hazardous. Section 3001(a) and (b) outline a two-step process for classifying wastes as hazardous. The Agency must first specify criteria to determine if the waste is "hazardous," 42 U.S.C.A. Section 6921(a), which is defined as presenting a "substantial" present or potential hazard to human health or the environment. 42 U.S.C.A Section

6904(5). Once the criteria are established - as they have been, 40 CFR Sections 261.10, 261.11 (1995) -- EPA must apply the criteria to identify a characteristic of hazardous waste or to list a waste as hazardous. The mixture and derived-from rules identify a broad class of wastes as hazardous without regard to the criteria established by the Agency itself. The proposed HWIR does not discuss how mixture and derived-from wastes pose a "substantial" present or potential threat to human health or the environment. The Agency does not discuss concentration levels, mobility, persistence, or any other objective factors of hazardousness that are listed in the statute or the regulations. Just because some mixture or derived-from wastes may be toxic does not require that all such wastes should be regulated as hazardous. The Agency also identifies mixture and derived-from waste as a "class," 60 Fed. Reg. at 66,348, partially to defuse arguments made in past litigation on these rules. Such an identification requires a finding that EPA has reason to believe that individual wastes within the class "typically or frequently are hazardous" under the definition at RCRA Section 1004(5). 40 C.F.R. Section 261.11(b). By EPA's own past practice, this has usually meant finding that more than fifty percent of the waste "typically or frequently" meet the statutory definition of hazardousness. See e.g., 56 Fed. Reg. 48,020 (1991). The Agency has made no finding that the majority of members of the class of mixture and derived-from wastes "typically or frequently" are hazardous. In addition, the class must have 'sufficient uniformity" to apply the criteria in 40 C.F.R. Section 261.11. 45 Fed. Reg. 33,114 (1980). It is plainly obvious that the class of mixture and derived-from wastes is anything but uniform, a point admitted by EPA in 1980. 45 Fed. Reg. 33,095-96 (1980) ("...the potential combinations of listed wastes and other wastes are infinite."). The class thus does not have the requisite uniformity needed to be classified as hazardous. [...]

MDF1 - USWAG, WHWP-00089, 6, 6 Utility Co./Assn.
USWAG opposes EPA's proposal to retain the mixture and derived-from rules. The automatic assumption that any waste (or material) mixed with or derived-from a "listed" waste possesses a similar chemical identity warranting regulation as a listed hazardous waste is factually incorrect and legally indefensible. The Rulemaking Record Does Not Support the Re-promulgation of the Mixture And Derived-from Rules Notwithstanding the Agency's attempt to minimize the unreasonable consequences of the mixture and derived-from rules through the establishment of risk-based exit levels, USWAG opposes the re-promulgation of these rules because the Agency has failed to demonstrate on the record that such wastes (i.e., those wastes that do not qualify for the exit levels) meet the statutory definition of "hazardous waste." Rather, the Agency supports its proposal to re-promulgate the rules and establish this huge category of regulated hazardous wastes based simply on its belief that such "mixture and derived-from" wastes "typically will pose risks that warrant regulation under Subtitle C" and "are reasonably likely to continue to pose threats to human health and the environment." 60 Fed. Reg. at 66348 (emphasis added). These conclusory assertions fall woefully short of the exacting evidentiary standards required under RCRA to declare a waste hazardous and subject it to the rigors of the Subtitle C system. As the Agency is well aware, a solid waste may be classified as a "hazardous waste" only if, "because of its quantity, concentration, or physical, chemical or infectious characteristics, [it] 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. Section 6903(5) (emphasis added). The "substantial hazard"criterion is the fundamental element of the statutory definition of hazardous waste. See, e.g., 40 C.F.R. Sections 261.10 and 261.11. In this rulemaking,

however, EPA has presented no basis in the record supporting its bare assertion that all mixture and derived-from wastes pose "a substantial hazard" warranting their designation as hazardous wastes as that term is defined under the statute. See Edison Electric Institute v. EPA, 2 F.3d 438, 446 (D.C. Cir. 1993) (EPA must provide factual support in the record for its conclusion that low volume mineral wastes have been disposed of in municipal solid waste landfills); Leather Industries v EPA, 40 F.3d 392, 403 (D.C. Cir. 1994) (EPA must justify on the record the Agency's assumptions underlying the regulations governing the use or disposal of sewage sludge). Rather, the re-promulgation of the mixture and derived-from rules would continue to erroneously declare enormous categories of waste to be hazardous by fiat, based solely on the wastes' prior history, without any specific consideration of concentration levels, mobility, persistence or any other objective factor required in RCRA Sections 3001(a) and (b) for identifying or listing hazardous wastes or EPA's identification or listing criteria at 40 C.F.R. Sections 261.10 and 261.11. For example, nowhere in the record does the Agency demonstrate that such wastes will "typically and frequently" test hazardous, which is a fundamental criterion under the Agency's own listing regulations and which has been interpreted by EPA to mean that at least 50 percent of the subject wastes exhibit some or all of the Agency's listing criteria set forth at Section 261.11(a). See, e.g., 56 Fed. Reg. 48020 (Sept. 23, 1991); 45 Fed. Reg. 33114 (May 19, 1980) ("a class of wastes may be listed generically so long as most of the wastes in the class" are hazardous) (emphasis added). 1/ There is no indication in the record that EPA has collected or analyzed any samples or otherwise attempted to demonstrate that 50 percent -- or any substantial percentage -- of mixtures or treatment residues meet any of the specific listing criteria set forth in Section 261.11(a). EPA's declarations that such wastes "typically will pose risks that warrant regulation under Subtitle C" and "are reasonably likely to continue to pose threats to human health and the environment" cannot, by themselves, create the factual record necessary for rendering a listing determination. While some mixtures and treatment residues may present some hazards under some conditions, it certainly does not follow -- nor has EPA demonstrated on the record -- that most (i.e., over 50%) mixtures and residues will pose a substantial hazard (e.g., exceed health-based constituent concentration levels by 100-1000 times), even if mismanaged. Thus, USWAG believes that EPA has not established an adequate evidentiary record demonstrating that "mixture and derived-from" wastes are "typically and frequently" hazardous. As such, EPA has not established the factual foundation for proceeding with its proposal to re-promulgate the mixture and derived-from rules. USWAG also takes issue with EPA's characterization of the mixture and derived-from rules as "exit" determinations. Id. at 66348. By attempting to recast the mixture and derived-from rules in this new light, EPA apparently hopes to avoid having to make independent hazardous waste determinations for these categories of wastes. The Agency, however, has historically acknowledged that the mixture and derived-from rules were a means of identifying additional hazardous wastes to be included in the Subtitle C system. See e.g., 55 Fed. Reg. 22520, 22661 (June 1, 1990). The goal of the rules was to ensure that those mixtures and treatment residues which otherwise would not be considered hazardous wastes are brought into and kept in the Subtitle C regime. See, e.g., 57 Fed. Reg. 7628 (March 3, 1992) (rules intended to close potentially major loopholes). Obviously, the rules, as EPA has consistently interpreted them, address entry of such wastes into the Subtitle C system, not their exit. Indeed, in the next breath in the preamble, EPA claims that it has the authority to list mixture and derived-from wastes as hazardous under the Agency's class listing procedure in 40 C.F.R. Section 261.11(b), which of course is an "entry" determination. 60 Fed. Reg. at 66348. EPA cannot have it both ways. The

Agency plainly views this matter as an "entry" issue and not an "exit" determination. EPA's proposal to list all mixture and derived-from wastes as hazardous under the class listing approach also must fail, however, because as explained above, EPA makes no attempt to demonstrate in the record that "individual wastes, within the class or type of waste, `typically and frequently' are hazardous." 40 C.F.R. Section 261.11(b). In any event, mixture and derived-from wastes do not qualify as the type of "class" that may be listed under section 261. As EPA itself has acknowledged, to list a class or category of wastes as hazardous, the class itself must have "sufficient uniformity" to enable EPA to rationally apply the Section 261.11(a) listing criteria to the members of that class and to determine whether they are typically or frequently hazardous. 45 Fed. Reg. 33114 ("[t]he Agency . . . must demonstrate that sufficient uniformity exists or is likely to exist."). There is little question that the universe of mixtures and treatment residues potentially subject to the mixture and derived-from rules is virtually infinite and enormously diverse. In short, there is not "sufficient uniformity" among the countless combinations of wastes potentially covered by the mixture and derived-from rules to justify listing such wastes as a class under Section 261.11. 1/ Moreover, EPA historically has required that samples of a waste class contain concentrations of toxic constituents at 100-1000 times specified health-based numbers to be considered as posing a "substantial hazard" under 261.11(a)(3). See, e.g., 56 Fed. Reg. 48018 (Sept. 23, 1991); see also 57 Fed. Reg. 21453 (May 20, 1992). The record does not support this finding in the case of mixture and derived-from wastes. [...]

MDF1 - Specialty Steel Industry, WHWP-00093, 4,1 Industry Assn.
SMA believes that a court would find that EPA has violated the Administrative Procedure Act ("APA") by regulating "in excess of its statutory jurisdiction" in the proposed HWIR. See APA Section 702(2)(c); 5 U.S.C. Chapter 5. EPA does not have the statutory jurisdiction to establish levels at which mixture and derived-from wastes can exit Subtitle C jurisdiction, because it does not have the statutory jurisdiction to regulate all mixture and derived-from wastes under Subtitle C in the first place. RCRA Section 3002 permits the Administrator to "promulgate regulations establishing such standards, applicable to generators of hazardous waste identified or listed under this subtitle [C], as may be necessary to protect human health and the environment." RCRA Section 3002; 42 U.S.C. Section 6922 (parenthetical added). This section gives EPA the power to regulate hazardous wastes -- and only hazardous wastes -- under Subtitle C. See id. A solid waste is deemed to be hazardous if it: (1) "is not excluded from regulation as a hazardous waste under Section 261.4(b)"; and (2) "exhibits any of the characteristics of hazardous waste identified in subpart C" or "is listed in subpart D of this part and has not been excluded from the lists in subpart D of this part under Sections 260.20 and 260.22 of this chapter." 40 C.F.R. Section 261.3(a). An additional factor in the determination of "hazardous" is whether the waste is a mixture or derived-from a listed waste. See 40 C.F.R. Section 261.3(a)(2)(iii). As described above, these mixture and derived-from factors in the definition of "hazardous" are only interim final rules, which the United States Court of Appeals for the District of Columbia has required to be subject to full notice and comment and revised by EPA. EPA does not subject the mixture and derived-from factors to full notice and comment in the current proposed rulemaking. Instead, the Agency proceeds with HWIR as if there is a statutory right to the mixture and derived-from rules. It states, "...[T]he Agency continues to believe that the mixture and derived-from rules are extremely important to regulating hazardous wastes and reducing risk to human health and the environment. However, EPA acknowledges that the mixture and derived-from rules apply regardless of the

concentrations and mobility of hazardous constituents in the waste. The purpose of this rulemaking is to reduce any overregulation of low-risk wastes captured by the mixture and derived-from rules." 60 Fed. Reg. at 66346. This conclusory statement does not meet the mandate that the rules be subject to full notice and comment and revised. Instead, it invites the regulated community to overlook the fundamental issue of the legality of the mixture and derived-from rules, and, instead, to focus on modifications to the rules. There is no statutory right to the mixture and derived-from rules and EPA does not present sufficiently cogent legal underpinnings for the rules in the proposed HWIR. HWIR is not a rulemaking that revises the mixture and derived-from rules; HWIR is simply one mechanism for fixing the problems caused by these rules. Therefore, the Agency should elide at least the mixture rule. Since these low-risk wastes will no longer be subject to Subtitle C regulation as mixtures, there will no longer be a need to establish exit levels for those wastes. EPA's statutory jurisdiction for HWIR will disappear. In the future, those wastes will only be regulated under Subtitle C if they exhibit one or more of the hazardous characteristics described in 40 C.F.R. Part 261, Subpart C.

MDF1 - Steel Manufacturers Assn., WHWP-00094, 4,1 Industry Assn.
SMA believes that a court would find that EPA has violated the Administrative Procedure Act ("APA") by regulating "in excess of its statutory jurisdiction" in the proposed HWIR. See APA Section 702(2)(c); 5 U.S.C. Chapter 5. EPA does not have the statutory jurisdiction to establish levels at which mixture and derived-from wastes can exit Subtitle C jurisdiction, because it does not have the statutory jurisdiction to regulate all mixture and derived-from wastes under Subtitle C in the first place. RCRA Section 3002 permits the Administrator to "promulgate regulations establishing such standards, applicable to generators of hazardous waste identified or listed under this subtitle [C], as may be necessary to protect human health and the environment." RCRA Section 3002; 42 U.S.C. Section 6922 (parenthetical added). This section gives EPA the power to regulate hazardous wastes -- and only hazardous wastes -- under Subtitle C. See id. A solid waste is deemed to be hazardous if it: (1) "is not excluded from regulation as a hazardous waste under Section 261.4(b)"; and (2) "exhibits any of the characteristics of hazardous waste identified in subpart C" or "is listed in subpart D of this part and has not been excluded from the lists in subpart D of this part under Sections 260.20 and 260.22 of this chapter." 40 C.F.R. Section 261.3(a). An additional factor in the determination of "hazardous" is whether the waste is a mixture or derived-from a listed waste. See 40 C.F.R. Section 261.3(a)(2)(iii). As described above, these mixture and derived-from factors in the definition of "hazardous" are only interim final rules, which the United States Court of Appeals for the District of Columbia has required to be subject to full notice and comment and revised by EPA. EPA does not subject the mixture and derived-from factors to full notice and comment in the current proposed rulemaking. Instead, the Agency proceeds with HWIR as if there is a statutory right to the mixture and derived-from rules. It states, "...[T]he Agency continues to believe that the mixture and derived-from rules are extremely important to regulating hazardous wastes and reducing risk to human health and the environment. However, EPA acknowledges that the mixture and derived-from rules apply regardless of the concentrations and mobility of hazardous constituents in the waste. The purpose of this rulemaking is to reduce any overregulation of low-risk wastes captured by the mixture and derived-from rules." 60 Fed. Reg. at 66346. This conclusory statement does not meet the mandate that the rules be subject to full notice and comment and revised. Instead, it invites the regulated community to overlook the fundamental issue of the legality of the mixture and derived-from rules, and, instead,

to focus on modifications to the rules. There is no statutory right to the mixture and derived-from rules and EPA does not present sufficiently cogent legal underpinnings for the rules in the proposed HWIR. HWIR is not a rulemaking that revises the mixture and derived-from rules; HWIR is simply one mechanism for fixing the problems caused by these rules. Therefore, the Agency should elide at least the mixture rule. Since these low-risk wastes will no longer be subject to Subtitle C regulation as mixtures, there will no longer be a need to establish exit levels for those wastes. EPA's statutory jurisdiction for HWIR will disappear. In the future, those wastes will only be regulated under Subtitle C if they exhibit one or more of the hazardous characteristics described in 40 C.F.R. Part 261, Subpart C.

MDF1 - Chrome Coalition, WHWP-00095, 4,1 Industry Assn.
SMA believes that a court would find that EPA has violated the Administrative Procedure Act ("APA") by regulating "in excess of its statutory jurisdiction" in the proposed HWIR. See APA Section 702(2)(c); 5 U.S.C. Chapter 5. EPA does not have the statutory jurisdiction to establish levels at which mixture and derived-from wastes can exit Subtitle C jurisdiction, because it does not have the statutory jurisdiction to regulate all mixture and derived-from wastes under Subtitle C in the first place. RCRA Section 3002 permits the Administrator to "promulgate regulations establishing such standards, applicable to generators of hazardous waste identified or listed under this subtitle [C], as may be necessary to protect human health and the environment." RCRA Section 3002; 42 U.S.C. Section 6922 (parenthetical added). This section gives EPA the power to regulate hazardous wastes -- and only hazardous wastes -- under Subtitle C. See id. A solid waste is deemed to be hazardous if it: (1) "is not excluded from regulation as a hazardous waste under Section 261.4(b)"; and (2) "exhibits any of the characteristics of hazardous waste identified in subpart C" or "is listed in subpart D of this part and has not been excluded from the lists in subpart D of this part under Sections 260.20 and 260.22 of this chapter." 40 C.F.R. Section 261.3(a). An additional factor in the determination of "hazardous" is whether the waste is a mixture or derived-from a listed waste. See 40 C.F.R. Section 261.3(a)(2)(iii). As described above, these mixture and derived-from factors in the definition of "hazardous" are only interim final rules, which the United States Court of Appeals for the District of Columbia has required to be subject to full notice and comment and revised by EPA. EPA does not subject the mixture and derived-from factors to full notice and comment in the current proposed rulemaking. Instead, the Agency proceeds with HWIR as if there is a statutory right to the mixture and derived-from rules. It states, "...[T]he Agency continues to believe that the mixture and derived-from rules are extremely important to regulating hazardous wastes and reducing risk to human health and the environment. However, EPA acknowledges that the mixture and derived-from rules apply regardless of the concentrations and mobility of hazardous constituents in the waste. The purpose of this rulemaking is to reduce any overregulation of low-risk wastes captured by the mixture and derived-from rules." 60 Fed. Reg. at 66346. This conclusory statement does not meet the mandate that the rules be subject to full notice and comment and revised. Instead, it invites the regulated community to overlook the fundamental issue of the legality of the mixture and derived-from rules, and, instead, to focus on modifications to the rules. There is no statutory right to the mixture and derived-from rules and EPA does not present sufficiently cogent legal underpinnings for the rules in the proposed HWIR. HWIR is not a rulemaking that revises the mixture and derived-from rules; HWIR is simply one mechanism for fixing the problems caused by these rules. Therefore, the Agency should elide at least the mixture rule. Since these low-risk wastes will no longer be subject to

Subtitle C regulation as mixtures, there will no longer be a need to establish exit levels for those wastes. EPA's statutory jurisdiction for HWIR will disappear. In the future, those wastes will only be regulated under Subtitle C if they exhibit one or more of the hazardous characteristics described in 40 C.F.R. Part 261, Subpart C.

MDF1 - Leather Industries of America, WHWP-00096, 4,1 Industry Assn.
SMA believes that a court would find that EPA has violated the Administrative Procedure Act ("APA") by regulating "in excess of its statutory jurisdiction" in the proposed HWIR. See APA Section 702(2)(c); 5 U.S.C. Chapter 5. EPA does not have the statutory jurisdiction to establish levels at which mixture and derived-from wastes can exit Subtitle C jurisdiction, because it does not have the statutory jurisdiction to regulate all mixture and derived-from wastes under Subtitle C in the first place. RCRA Section 3002 permits the Administrator to "promulgate regulations establishing such standards, applicable to generators of hazardous waste identified or listed under this subtitle [C], as may be necessary to protect human health and the environment." RCRA Section 3002; 42 U.S.C. Section 6922 (parenthetical added). This section gives EPA the power to regulate hazardous wastes -- and only hazardous wastes -- under Subtitle C. See id. A solid waste is deemed to be hazardous if it: (1) "is not excluded from regulation as a hazardous waste under Section 261.4(b)"; and (2) "exhibits any of the characteristics of hazardous waste identified in subpart C" or "is listed in subpart D of this part and has not been excluded from the lists in subpart D of this part under Sections 260.20 and 260.22 of this chapter." 40 C.F.R. Section 261.3(a). An additional factor in the determination of "hazardous" is whether the waste is a mixture or derived-from a listed waste. See 40 C.F.R. Section 261.3(a)(2)(iii). As described above, these mixture and derived-from factors in the definition of "hazardous" are only interim final rules, which the United States Court of Appeals for the District of Columbia has required to be subject to full notice and comment and revised by EPA. EPA does not subject the mixture and derived-from factors to full notice and comment in the current proposed rulemaking. Instead, the Agency proceeds with HWIR as if there is a statutory right to the mixture and derived-from rules. It states, "...[T]he Agency continues to believe that the mixture and derived-from rules are extremely important to regulating hazardous wastes and reducing risk to human health and the environment. However, EPA acknowledges that the mixture and derived-from rules apply regardless of the concentrations and mobility of hazardous constituents in the waste. The purpose of this rulemaking is to reduce any overregulation of low-risk wastes captured by the mixture and derived-from rules." 60 Fed. Reg. at 66346. This conclusory statement does not meet the mandate that the rules be subject to full notice and comment and revised. Instead, it invites the regulated community to overlook the fundamental issue of the legality of the mixture and derived-from rules, and, instead, to focus on modifications to the rules. There is no statutory right to the mixture and derived-from rules and EPA does not present sufficiently cogent legal underpinnings for the rules in the proposed HWIR. HWIR is not a rulemaking that revises the mixture and derived-from rules; HWIR is simply one mechanism for fixing the problems caused by these rules. Therefore, the Agency should elide at least the mixture rule. Since these low-risk wastes will no longer be subject to Subtitle C regulation as mixtures, there will no longer be a need to establish exit levels for those wastes. EPA's statutory jurisdiction for HWIR will disappear. In the future, those wastes will only be regulated under Subtitle C if they exhibit one or more of the hazardous characteristics described in 40 C.F.R. Part 261, Subpart C.

MDF1 - The Fertilizer Institute, WHWP-00101, 20, 1 Industry Assn.

A Failure to Promulgate a Rule by the Consent Decree Deadline Will Nullify the Legal Effect of the Mixture and Derived-From Rules. If EPA does not promulgate new mixture and derived-from rules in accordance with the consent decree, then the legal effect of those rules will lapse. The consent decree merely provided an extension of the deadline contained in the Chafee Amendment. The original mixture and derived-from rules (1980) were vacated by the D.C. Circuit because of inadequate notice and comment. EPA promulgated "interim" mixture and derived-from rules with a sunset provision of April 28, 1993. The Chafee Amendment extended that sunset provision to October 1, 1994 and provided that "EPA shall promulgate revisions to [the mixture and derived-from rules] as reissued on March 3, 1992, by October 1, 1994." The Chafee Amendment further provided that the effectiveness of the interim mixture and derived-from rules would not terminate until revisions were promulgated in accordance with the language quoted above. The Mobil Oil court concluded that a judicial challenge to repromulgation of the interim rules was mooted by the Chafee Amendment. Critically, that decision was issued prior to October 1, 1994 and did not address the legal effect of EPA's failure to meet the statutory deadline in the Chafee Amendment. A judicial challenge to the mixture and derived-from rules' effectiveness after October 1, 1994 would present a completely different question to a court than the question presented by Mobil Oil. EPA would not have complied with a statutory mandate to promulgate revisions to two rules that were originally vacated based on lack of adequate notice and comment. (Moreover, EPA would be defending rules that it has acknowledged are substantively deficient due to their overbreadth.) An interim rule promulgated without notice and comment and in place due to procedural defects in an original rule, cannot be legally effective after the passage of a Congressionally mandated deadline for promulgation. The language of the Chafee amendment states: "Funds appropriated or transferred to EPA may be used to develop revisions to 40 CFR 261.3, as reissued on March 3, 1992, published at 57 Fed. Reg. 7628 et seq. EPA shall promulgate revisions to paragraphs (a)(2)(iv) and (c)(2)(i) of 40 CFR 261.3, as reissued on March 3, 1992, by October 1, 1994, but any revisions to such paragraphs shall not be promulgated or become effective prior to October 1, 1993. Notwithstanding paragraph (e) of 40 CFR 261.3, as reissued on March 3, 1992, paragraphs (a)(2)(iv) and (c)(2)(i) of such regulations shall not be terminated or withdrawn until revisions are promulgated and become effective in accordance with the preceding sentence. The deadline of October 1, 1994 shall be enforceable under section 7002 of the Solid Waste Disposal Act. (Pub. L. No. 102-389, 106 Stat. 1571, 1602-03)."

MDF1 - API, WHWP-00106, 12, 2 Industry Assn.

Contrary to EPA's assertion, it is surely arguable that the mixture and derived-from rules are not valid exercises of EPA's authority to list wastes as hazardous under section 3001. EPA's summary repromulgation of the original mixture and derived-from rules in 1992 far exceeded the explicit statutory bounds on the Agency's authority to identify "hazardous wastes" under Subtitle C of RCRA. Section 1004(5) of RCRA expressly defines hazardous waste as a solid waste presenting "substantial" present or potential hazards to health or the environment. The mixture and derived-from rules deem all mixtures and treatment residues to be hazardous based solely on their history without regard to their composition, character, concentration or any other factor identified in section 3001 (a) of RCRA or 40 CFR Sections 261.10 and 261.11. As EPA admits, vast quantities of wastes regulated under the mixture and derived-from rules actually pose little or no risk and are, thereby, subject to unnecessarily stringent controls under Subtitle C. In the May 1992

HWIR proposal, EPA conceded that the mixture and derived-from rules have "resulted in the regulation of certain low hazard wastes as hazardous," and that EPA's own analysis indicates that "millions of tons" of mixtures and derived-from residuals that must be managed as hazardous ... may actually pose quite low hazards." 57 Fed. Reg. 21453. 1/ This is a far cry from proving substantial hazards to human health and the environment. Instead, EPA by fiat identified wastes under the mixture and derived-from rules as hazardous, ignoring the statutorily prescribed procedures for identifying hazardous waste by characteristic and by listing. RCRA sections 3001 (a) and (b) require EPA to follow a specific two-step process for identifying hazardous wastes that meet the statutory definition of that term. First, EPA must specify criteria to determine if a waste poses a substantial hazard; then, EPA must apply those criteria by promulgating hazardous waste "characteristic" tests or by "listing" particular hazardous wastes. The mixture and derived-from rules, however, simply ignore this precise statutory blueprint and declare all mixtures of listed hazardous waste and solid waste, and all residuals from the treatment of hazardous wastes to be hazardous wastes, completely without regard to whether such mixtures or residuals pose any health or environmental hazards. EPA also erroneously asserts that the original mixture and derived-from rules are valid exercises of EPA's power to list classes of hazardous wastes under 40 CFR 261.11 (b). The mixture and derived-from rules subject so many different types of waste to EPA regulations that it is disingenuous for EPA to assert that these wastes are a class. By definition, class indicates some commonality among the members of the class. Under the mixture and derived-from rules, a wide range of materials are deemed hazardous and EPA makes no attempt to look at the composition or character of this so called "class" of materials. Moreover, EPA has failed to provide record evidence or a rational explanation to support a conclusion that mixtures and derived-from residues as a class typically or frequently pose substantial hazards. The rulemaking record does not provide a rational basis for concluding that mixture and derived-from wastes as a class typically or frequently pose substantial hazards. The specific dangers to which EPA alludes are based on incidents involving mismanagement of wastes that may or may not involve wastes identified as hazardous by reason of the mixture and derived-from rules. Accordingly, the docket does not support EPA's determination that the rule is a valid exercise of EPA's power to regulate a class of materials as hazardous. The record itself consists primarily of materials which are either irrelevant or simply vague, conclusory, or self-serving. In sum, API vigorously disagrees with EPA's characterization of the original mixture and derived-from rules as valid exercises of EPA's authority under RCRA. These rules subject vast quantities of waste to regulation without any demonstration that the wastes meet the criteria for listing a waste as hazardous under RCRA. [...]

MDF1 - Pacifi Corp., WHWP-00108, 5, 2 Utility Co./Assn.
Notwithstanding the Agency's attempt to minimize the unreasonable consequences of the mixture and derived-from rules through the establishment of risk-based exit levels, PacifiCorp opposes the re-promulgation of these rules because the Agency has failed to demonstrate on the record that such wastes (i.e., those wastes that do not qualify for the exit levels) meet the statutory definition of "hazardous waste." Rather, the Agency supports its proposal to re-promulgate the rules and establish this huge category of regulated hazardous wastes based simply on its belief that such "mixture and derived-from" wastes "typically will pose risks that warrant regulation under Subtitle C" and "are reasonably likely" to continue to pose threats to human health and the environment." 60 Fed. Reg. at 66348 (emphasis added). These assertions fall woefully short of the exacting

standards required under RCRA to declare a waste hazardous and subject it to the rigors of Subtitle C. As the Agency is well aware, a solid waste may be classified as a "hazardous waste" only if, "because of its quantity, concentration, or physical, chemical or infectious characteristics, [it] 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. Section 6903(5) (emphasis added). The "substantial hazard" criterion is the fundamental element of the statutory definition of hazardous waste. See, e.g., 40 C.F.R. Sections 261.10 and 261.11. Here, however, EPA has presented no basis in the rulemaking record supporting the position that all mixture and derived-from wastes pose "a substantial hazard" warranting their designation as hazardous wastes as that term is defined under the statute. Rather, the re-promulgation of the mixture and derived-from rules would continue to erroneously declare enormous categories of waste to be hazardous by fiat, based solely on the wastes' prior history, without any specific consideration of concentration levels, mobility, persistence or any other objective factor required in RCRA sections 3001(a) and (b) for identifying or listing hazardous wastes or EPA's identification or listing criteria at 40 C.F.R. Sections 261.10 and 261.11. For example, nowhere in the record does the Agency establish that such wastes will "typically and frequently" test hazardous, which is a fundamental criterion under the Agency's own listing regulations and which has been interpreted by EPA to mean that at least 50 percent of the subject wastes exhibit some or all of the Agency's listing criteria set forth at Section 261.11 (a). See, e.g., 56 Fed. Reg. 48020 (Sept. 23, 1991); 45 Fed. Reg. 33114 (May 19, 1980) ("a class of wastes may be listed generically so long as most of the wastes in the class" are hazardous) (emphasis added) 1/. There is no indication in the record that EPA has collected or analyzed any samples or otherwise attempted to demonstrate that 50 percent--or any substantial percentage--of mixtures or treatment residues meet any of the specific listing criteria set forth in Section 261.11(a). EPA's declarations that such wastes "typically will pose risks that warrant regulation under Subtitle C" and "are reasonably likely to continue to pose threats to human health and the environment" cannot, by themselves, create the factual record necessary for rendering a listing determination. While some mixtures and treatment residues may present some hazards under some conditions, it certainly does not follow--nor has EPA demonstrated on the record--that most (ie., over 50 percent) mixtures and residues will pose a substantial hazard (e.g., exceed health-based constituent concentration levels by 100-1000 times), even if mismanaged. Thus, PacifiCorp believes that EPA has not established an adequate record demonstrating that "mixture and derived-from" wastes are "typically and frequently" hazardous. As such, we do not believe EPA can proceed with its proposal to re-promulgate the mixture and derived-from rules. PacifiCorp also takes issue with EPA's characterization of the mixture and derived-from rules as "exit" determinations. Id. at 66348. By attempting to cast the mixture and derived-from rules in this light, EPA apparently hopes to avoid having to make independent hazardous waste determinations for these categories of wastes. The Agency, however, has historically acknowledged that the mixture and derived-from rules were a means of identifying additional hazardous wastes to be included in the Subtitle C system. See e.g., 55 Fed. Reg. 22520, 22661 (June 1, 1990). The goal of the rules was to ensure that those mixtures and treatment residues which otherwise would not be considered hazardous wastes are brought into and kept in the Subtitle C regime. See, e.g., 57 Fed. Reg. 7628 (March 3, 1992) (rules intended to close potentially major loopholes). Obviously, the rules address entry of such wastes into the Subtitle C system, not their exit. Indeed, in the preamble, EPA claims that it has the authority to list mixture and derived-from wastes as hazardous under the Agency's class listing

procedure in 40 C.F.R. Section 261.11(b), which of course is an "entry" determination. 60 Fed. Reg. at 66348. Therefore, EPA plainly views this matter as an "entry" issue and not a "exit" determination. EPA's proposal to list all mixture and derived-from wastes as hazardous under the class listing approach also must fail, however, because as explained above, EPA makes no attempt to demonstrate in the record that "individual wastes, within the class or type of waste, 'typically and frequently' are hazardous." 40 C.F.R. Section 261.11(b). In any event, mixture and derived-from wastes do not qualify as the type of "class" that may [be] listed under section 261. As EPA itself has acknowledged, to list a class or category of wastes as hazardous, the class itself must have "sufficient uniformity" to enable EPA to rationally apply the Section 261.11(a) listing criteria to the members of that class and to determine whether they are typically or frequently hazardous. 45 Fed. Reg. 33114 ("[t]he Agency . . . must demonstrate that sufficient uniformity exists or is likely to exist."). There is little question that the universe of mixtures and treatment residues potentially subject to the mixture and derived-from rules is virtually infinite and enormously diverse. Thus, PacifiCorp believes that there is not "sufficient uniformity" among the countless combinations of wastes potentially covered by the mixture and derived from rules to justify listing such wastes as a class under Section 261.11. 1/ Moreover, EPA historically has required that samples of a waste class contain concentrations of toxic constituents at 100-1000 times specified health-based numbers to be considered as posing a "substantial hazard" under Section 261.11(a)(3). See, e.g., 56 Fed. Reg. 48018 (Sept. 23, 1991); see also 57 Fed. Reg. 21453 (May 20, 1992). The record does not support this finding in the case of mixture and derived-from wastes.[...]

MDF1 - Pacifi Corp., WHWP-00108, 5, 2 Utility Co./Assn.
[...] Thus, from the perspective of human health and the environment, there is little rationale for continuing these over broad rules. For all of the above reasons, PacifiCorp opposes EPA's proposal to re-promulgate the mixture and derived-from rules. 1/ Moreover, EPA historically has required that samples of a waste class contain concentrations of toxic constituents at 100-1000 times specified health-based numbers to be considered as posing a "substantial hazard" under Section 261.11(a)(3). See, e.g., 56 Fed. Reg. 48018 (Sept. 23, 1991); see also 57 Fed. Reg. 21453 (May 20, 1992). The record does not support this finding in the case of mixture and derived-from wastes.

MDF1 - Pacifi Corp., WHWP-00108, 4, 7 Utility Co/Assn.
PacifiCorp opposes EPA's proposal to retain the mixture and derived-from rules. The assumption that any waste (or material) mixed with or derived-from a "listed" waste possesses a similar chemical identity warranting regulation as a listed hazardous waste if factually incorrect and legally indefensible.

MDF1 - Detroit Edison Company, WHWP-00112, 2, 1 Utility Co./Assn
Even though the Agency has attempted to minimize the unreasonable consequences of the mixture and derived-from rules by establishing risk-based exit levels, DECo opposes the re-promulgation of these rules. The re-promulgation of the mixture and derived-from rules will continue to incorrectly declare large categories of waste to be hazardous, without any specific consideration

of concentration levels, mobility, persistence or any other objective factor required in RCRA.

MDF1 - ASARCO, Inc., WHWP-00125, 3, 1 Industry
The mixture and derived-from rules are unnecessary because they subject large volumes of material, which pose little or no risk to human health or the environment, to regulation as hazardous waste. Where the rules result in the unnecessary regulation of such materials as wastes, EPA exceeds its statutory authority, which is limited to regulating as hazardous only those wastes that pose actual risks to human health or the environment. Additionally, EPA must follow the mandate of the court in American Mining Congress v. EPA, 824 F.2d 1177 (D.C. Cir. 1987), by refraining from characterizing non-waste materials as wastes. EPA has acknowledged in the proposed rule, as well as in several other rulemakings, that regulation of wastes under the mixture and derived-from rules is often inequitable in that low-risk wastes are subjected to the same stringent controls applied to truly hazardous wastes. See, e.g., 60 Fed. Reg. 66346 (December 21, 1995); 57 Fed. Reg. 21454 (May 20, 1992); 45 Fed. Reg. 33095 (May 19, 1980). It is time to correct this aspect of the RCRA regulations. [...]

MDF1 - ASARCO, Inc., WHWP-00125, 3, 1 Industry
[...] The rules require the presumption that mixtures of listed hazardous wastes with non-hazardous wastes are uniformly problematic, or that wastes derived from the treatment, storage, or disposal of a listed hazardous waste are always hazardous. By failing to justify this presumption, EPA is exceeding its statutory authority under RCRA. In vacating the mixture and derived-from rules, the D.C. Circuit Court of Appeals even described the derived-from rule as "counterintuitive as applied to processes designed to render wastes NonHazardous." Shell Oil v. EPA, 950 F.2d 741, 752 (D.C. Cir. 1991). The court explained, "Rather than presuming that these processes will achieve their goals, the derived-from rule assumes their failure." Id. EPA has even acknowledged that "regulators are in a much better position to make judgments about the degree of risk presented by certain wastes (and that EPA) recognizes that the 'mixture' and 'derived-from' rules have resulted in unnecessarily stringent requirements for certain low-risk wastes." 57 Fed. Reg. 21,454 (May 20, 1992). [...]

MDF1 - ASARCO, Inc., WHWP-00125, 3, 1 Industry
[...] EPA's determination in this proposed rule that the changes in the mixture and derived from rules are not warranted lacks proper justification. This approach clearly violates RCRA's statutory directive to regulate as hazardous only those wastes which pose substantial risk to human health and the environment. Asarco believes that, at a minimum, EPA must provide a legitimate justification, based on well-supported scientific data, for continued regulation under the mixture and derived-from rules. [...]

MDF1 - SOCMA, WHWP-00138, 3,1 Industry Assn.
[...] Further, the proposed rule fails to recognize that EPA lacks the statutory authority to promulgate the mixture and derived-from rules. The Mixture and Derived-From Rules Overreach EPA's Authority To Regulate Hazardous Waste EPA may only regulate as hazardous waste those solid wastes that may: (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) 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. Section 6903(5))]". EPA has failed to provide any convincing evidence in this rulemaking record that, merely because waste is derived-from or mixed with a hazardous waste, the resulting waste itself poses a threat sufficient to meet the definition of a hazardous waste. EPA's statement that RCRA "is silent on the question of how to determine that a waste is eligible to exit the system" is irrelevant. 60 Fed. Reg. at 66348. Under the above-quoted definition, a waste is either hazardous or it is not hazardous. If a listed waste mixes with another material so that it no longer poses a "substantial threat" to human health or the environment, then, by the very terms of the statute, the waste is no longer a hazardous waste. EPA's mixture and derived-from rules ignore this plain meaning of the statute. They effectively expand the RCRA program to apply not only to wastes that "pose a substantial threat," but also to any waste which is incidentally composed in any way of a component of a waste that previously posed a substantial threat, and to any waste that comes from a waste that previously posed a substantial threat. This failure to examine the present characteristics of the waste in question ignores the fundamental determination that the Agency is charged with making under RCRA, namely whether the waste presently poses a substantial risk. EPA argues that the mixture and derived-from rules are merely "class 'listings' under Section 3001" of RCRA. 60 Fed. Reg. at 66348. This argument is without merit. Section 3001 authorizes EPA to adopt criteria for determining which wastes meet the definition of a hazardous waste as either a listed or characteristic waste; this section does not give EPA the authority to designate as hazardous wastes those wastes that do not pose a substantial threat. See 42 U.S.C. Section 6921. EPA also relies on its regulations, which state that: "[t]he Administrator may list classes or types of solid waste as hazardous waste if he has reason to believe that individual wastes, within the class or type of waste, typically or frequently are hazardous under the definition of hazardous waste found in Section 1004(5) of the Act [(40 C.F.R. Section 261.11(b))]". Yet, nowhere in this or prior rulemakings has EPA shown that the "individual wastes, within the class or type of waste, typically or frequently are hazardous." EPA merely states that it has in the past "documented numerous instances" where wastes mixed with or derived-from hazardous wastes were found to be hazardous. This does not satisfy the requirement that EPA show that the wastes "typically or frequently" will be found to be hazardous. 60 Fed. Reg. at 66348. Thus, EPA lacks authority to issue or administer the mixture and derived-from rules.

MDF1 - Duquesne Light, WHWP-00143, 1, 3 Utility Co./Assn.
While we support EPA for its innovative approach in the proposed rule, we do take exception with EPA's initial conclusion that all "mixture and derived-from wastes" meet the statutory definition of a hazardous waste in the first place. We do not believe there is adequate information that demonstrates "mixture and derived-from wastes" should automatically be considered "hazardous" only because of the way they were generated. EPA justifies its proposal to re-promulgate the rules based simply on a belief that mixture and derived-from wastes "typically will pose risks that warrant regulation under Subtitle C". (60 F.R. 66348) This assertion alone does not meet any RCRA standard for classifying a waste as hazardous. In this era of limited resources and the current emphasis on cost-effective regulation, EPA should reconsider the impact the rule as proposed would create on industry. It makes little sense to expend substantial resources in handling all "mixture and derived-from wastes" as hazardous, even under a contingent management approach, without any corresponding increase in protection to human health and the

environment.

MDF1 - Acrylonitrile Group, Inc., WHWP-00145, 2, 5 Industry Assn.
The AN Group [continues] to question the legality of the "mixture and derived-from rules," 40 C.F.R. Sections 261.3(a)(2)(iv), 261.3(c)(2)(i), which are being reproposed in the HWIR proposal. 60 Fed. Reg. 66, 344, 66, 440 (1995). The mixture and derived-from rules will continue to apply to wastes that will not be able to exit the Subtitle C regulatory system via the HWIR. While EPA claims that the proposed HWIR will "reduce any overregulation of low-risk wastes captured by the mixture and derived-from rules," 60 Fed. Reg. at 66,346, many wastes, such as those containing acrylonitrile, will not be able to exit the system. As a result, many wastes that do not pose substantial, if any, risk to human health and the environment will continue to be unnecessarily subject to regulation as a hazardous waste. By indiscriminately proposing the mixture and derived-from rules, the Agency is exceeding its statutory and regulatory authority and identifying wastes as hazardous without regard to whether they pose a "substantial" present or potential hazard to human health or the environment, as is required by RCRA. 42 U.S.C.A. Section 6904(5) (West 1995). The Agency first claims that the mixture and derived-from rules are authorized by Sections 3002-3004 of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C.A. Sections 6922-24, which direct regulation of hazardous wastes until they no longer pose a hazard to the public. 60 Fed. Reg. at 66,348. These sections of RCRA provide for hazardous waste management standards for generators, transporters, and treatment, storage and disposal facilities -- not for identifying hazardous wastes. That role is unambiguously carried out by Section 3001. 42 U.S.C.A. Section 6921. Indeed, in previous promulgations and in litigation, EPA relied primarily on Section 3001 to justify the mixture and derived-from rules. Next, EPA claims authority for the mixture and derived-from rules from Section 3001. 60 Fed. Reg. at 66,348. The Agency, however, has not followed the required procedures or made the findings required by RCRA to identify "mixture and derived-from wastes" as hazardous. Sections 3001(a) and (b) outline a two-step process for classifying wastes as hazardous. The Agency must first specify criteria to determine if the waste is "hazardous," 42 U.S.C.A. Section 6921(a), which is defined as presenting a "substantial" present or potential hazard to human health or the environment. 42 U.S.C.A. Section 6904(5). Once the criteria are established -- as they have been, 40 C.F.R. 261.10, 261.11 (1995) -- EPA must apply the criteria to identify a characteristic of hazardous waste or to list a waste as hazardous. The mixture and derived-from rules identify a broad class of wastes as hazardous without regard to the criteria established by the Agency itself. The proposed HWIR does not discuss how mixture and derived-from wastes pose a "substantial" present or potential threat to human health or the environment. The Agency does not discuss concentration levels, mobility persistence, or any other objective factors of hazardousness that are listed in the statute or the regulations. Just because some mixture or derived-from wastes may be toxic does not require that all such wastes be regulated as hazardous. The Agency also identifies mixture and derived-from wastes as a "class," 60 Fed. Reg. at 66,348, partially to defuse arguments made in past litigation on these rules. Such an identification requires a finding that EPA has reason to believe that individual wastes within the class "typically or frequently are hazardous" under the definition at RCRA Section 1004(5). 40 C.F.R. Section 261.11(b). By EPA's own past practice, this has usually meant finding that more than fifty percent of the waste "typically or frequently" meets the statutory definition of hazardousness. See, e.g., 56 Fed. Reg. 48,020 (1991). The Agency has made no finding that the majority of members of the class of mixture and derived-from wastes

"typically or frequently" are hazardous. In addition, the class must have "sufficient uniformity" to apply the criteria in 40 C.F.R. Section 261.11. 45 Fed. Reg. 33,114 (1980). It is plainly obvious that the class of mixture and derived-from wastes is anything but uniform, a point admitted by EPA in 1980. 45 Fed. Reg. 33,095-96 (1980) ("the potential combinations of listed wastes and other wastes are infinite"). The class thus does not have the requisite uniformity needed to be classified as hazardous. [...]

MDF1 - Air Products & Chemicals, Inc., WHWP-00148, 6, 4 Industry
Air Products also continues to question the legality of the "mixture and derived-from rules," 40 C.F.R. Sections 261.3(a)(2)(iv), 261.3(c)(2)(i), which are being reproposed in the HWIR proposal. 60 Fed. Reg. at 66,440. The mixture and derived-from rules will continue to apply to wastes that will not be able to exit the Subtitle C regulatory system via the HWIR. While EPA claims that the proposed HWIR will "reduce any overregulation of low-risk wastes captured by the mixture and derived-from rules," 60 Fed. Reg. at 66,346, many wastes, such as those containing methanol, will not be able to exit the system. As a result, many wastes that do not pose substantial, if any, risk to human health and the environment will continue to be unnecessarily subject to regulation as a hazardous waste. By indiscriminately proposing the mixture and derived-from rules, the Agency is exceeding its statutory and regulatory authority and identifying wastes as hazardous without regard to whether they pose a "substantial" present or potential hazard to human health or the environment, as is required by RCRA. 42 U.S.C.A. Section 6904(5) (West 1995). The Agency first claims that the mixture and derived-from rules are authorized by sections 3002-3004 of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C.A. Sections 6922-24, which direct regulation of hazardous wastes until they no longer pose a hazard to the public. 60 Fed. Reg. at 66,348. These sections of RCRA provide for hazardous waste management standards for generators, transporters, and treatment, storage and disposal facilities -- not for identifying hazardous wastes. That role is unambiguously carried out by section 3001. 42 U.S.C.A. Section 6921. Indeed, in previous promulgations and in litigation, EPA relied primarily on section 3001 to justify the mixture and derived-from rules. Next, EPA claims authority for the mixture and derived-from rules from section 3001. 60 Fed. Reg. at 66,348. The Agency, however, has not followed the required procedures or made the findings required by RCRA to identify "mixture and derived-from wastes" as hazardous. Sections 3001(a) and (b) outline a two-step process for classifying wastes as hazardous. The Agency must first specify criteria to determine if the waste is "hazardous," 42 U.S.C.A. Section 6921(a), which is defined as presenting a "substantial" present or potential hazard to human health or the environment. 42 U.S.C.A. Section 6904(5). Once the criteria are established -- as they have been, 40 C.F.R. Sections 261.10, 261.11 (1995) -- EPA must apply the criteria to identify a characteristic of hazardous waste or to list a waste as hazardous. The mixture and derived-from rules identify a broad class of wastes as hazardous without regard to the criteria established by the Agency itself. The proposed HWIR does not discuss how mixture and derived-from wastes pose a "substantial" present or potential threat to human health or the environment. The Agency does not discuss concentration levels, mobility, persistence, or any other objective factors of hazardousness that are listed in the statute or the regulations. Just because some mixture or derived-from wastes may be toxic does not require that all such wastes be regulated as hazardous. The Agency also identifies mixture and derived-from wastes as a "class," 60 Fed. Reg. at 66,348, partially to defuse arguments made in past litigation on these rules. Such an identification requires a finding that EPA has reason to

believe that individual wastes within the class "typically or frequently are hazardous" under the definition at RCRA Section 1004(5). 40 C.F.R. Section 261.11(b). By EPA's own past practice, this has usually meant finding that more than fifty percent of the waste "typically or frequently" meets the statutory definition of hazardousness. See, e.g., 56 Fed. Reg. 48,020 (1991). The Agency has made no finding that the majority of members of the class of mixture and derived-from wastes "typically or frequently" are hazardous. In addition, the class must have "sufficient uniformity" to apply the criteria in 40 C.F.R. Section 261.11. 45 Fed. Reg. 33,114 (1980). It is plainly obvious that the class of mixture and derived-from wastes is anything but uniform, a point admitted by EPA in 1980. 45 Fed. Reg. 33,095-96 (1980) ("the potential combinations of listed wastes and other wastes are infinite"). The class thus does not have the requisite uniformity needed to be classified as hazardous. [...]

MDF1 - Kaiser Aluminum & Chemical Corp., WHWP-00149, 5, 1 Industry
The "Mixture and Derived-From Rules" Are Unlawfully Overbroad and Continue to Regulate Wastes that Pose No Hazard. Kaiser also continues to question the legality of the "mixture and derived-from rules," 40 C.F.R. Sections 261.3(a)(2)(iv), 261.3(c)(2)(i), which are being reproposed in the HWIR proposal. 60 Fed. Reg. at 66,440. The mixture and derived-from rules will continue to apply to wastes that will not be able to exit the Subtitle C regulatory system via the HWIR. While EPA claims that the proposed HWIR will "reduce any overregulation of low-risk wastes captured by the mixture and derived-from rules," 60 Fed. Reg. at 66,346, many wastes, such as those containing cyanide, will not be able to exit the system. As a result, many wastes that do not pose substantial, if any, risk to human health and the environment will continue to be unnecessarily subject to regulation as a hazardous waste. By indiscriminately proposing the mixture and derived-from rules, the Agency is exceeding its statutory and regulatory authority and identifying wastes as hazardous without regard to whether they pose a "substantial" present or potential hazard to human health or the environment, as is required by RCRA. 42 U.S.C.A. Section 6904(5) (West 1995). The Agency first claims that the mixture and derived-from rules are authorized by sections 3002-3004 of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C.A. Sections 6922-24, which direct regulation of hazardous wastes until they no longer pose a hazard to the public. 60 Fed. Reg. at 66,348. These sections of RCRA provide for hazardous waste management standards for generators, transporters, and treatment, storage and disposal facilities -- not for identifying hazardous wastes. That role is unambiguously carried out by section 3001. 42 U.S.C.A. Section 6921. Indeed, in previous promulgations and in litigation, EPA relied primarily on section 3001 to justify the mixture and derived-from rules. Next, EPA claims authority for the mixture and derived-from rules from section 3001. 60 Fed. Reg. at 66,348. The Agency, however, has not followed the required procedures or made the findings required by RCRA to identify "mixture and derived-from wastes" as hazardous. Sections 3001(a) and (b) outline a two-step process for classifying wastes as hazardous. The Agency must first specify criteria to determine if the waste is "hazardous," 42 U.S.C.A. Section 6921(a), which is defined as presenting a "substantial" present or potential hazard to human health or the environment. 42 U.S.C.A. Section 6904(5). Once the criteria are established -- as they have been, 40 C.F.R. Sections 261.10, 261.11 (1995) -- EPA must apply the criteria to identify a characteristic of hazardous waste or to list a waste as hazardous. The mixture and derived-from rules identify a broad class of wastes as hazardous without regard to the criteria established by the Agency itself.

The proposed HWIR does not discuss how mixture and derived-from wastes pose a "substantial" present or potential threat to human health or the environment. The Agency does not discuss concentration levels, mobility, persistence, or any other objective factors of hazardousness that are listed in the statute or the regulations. Just because some mixture or derived-from wastes may be toxic does not require that all such wastes be regulated as hazardous. The Agency also identifies mixture and derived-from wastes as a "class," 60 Fed. Reg. at 66,348, partially to defuse arguments made in past litigation on these rules. Such an identification requires a finding that EPA has reason to believe that individual wastes within the class "typically or frequently are hazardous" under the definition at RCRA Section 1004(5). 40 C.F.R. Section 261.11(b). By EPA's own past practice, this has usually meant finding that more than fifty percent of the waste "typically or frequently" meets the statutory definition of hazardousness. See, e.g., 56 Fed. Reg. 48,020 (1991). The Agency has made no finding that the majority of members of the class of mixture and derived-from wastes "typically or frequently" are hazardous. In addition, the class must have "sufficient uniformity" to apply the criteria in 40 C.F.R. Section 261.11. 45 Fed. Reg. 33,114 (1980). It is plainly obvious that the class of mixture and derived-from wastes is anything but uniform, a point admitted by EPA in 1980. 45 Fed. Reg. 33,095-96 (1980) ("the potential combinations of listed wastes and other wastes are infinite"). The class thus does not have the requisite uniformity needed to be classified as hazardous. [...]

MDF1 - Holnam Inc., WHWP-00150, 11, 1 Waste Mgmt. Co.
By indiscriminately proposing the mixture and derived-from rules, the Agency is exceeding its statutory and regulatory authority and identifying wastes as hazardous without regard to whether they pose a "substantial" present or potential hazard to human health or the environment, as is required by RCRA. 42 U.S.C.A. Section 6904 (5) (West 1995). The Agency first claims that the mixture and derived-from rules are authorized by sections 3002-3004 of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C.A. Sections 6922-24, which direct regulation of hazardous wastes until they no longer pose a hazard to the public. 60 Fed. Reg. at 66,348. These sections of RCRA provide for hazardous waste management standards for generators, transporters, and treatment, storage and disposal facilities -- not for identifying hazardous wastes. That role is unambiguously carried out by section 3001. 42 U.S.C.A. Section 6921. Indeed, in previous promulgations and in litigation, EPA relied primarily on section 3001 to justify the mixture and derived-from rules. Next, EPA claims authority for the mixture and derived-from rules from section 3001. 60 Fed. Reg. at 66,348. The Agency, however, has not followed the required procedures or made the findings required by RCRA to identify "mixture and derived-from wastes" as hazardous. Sections 3001 (a) and (b) outline a two-step process for classifying wastes as hazardous. The Agency must first specify criteria to determine if the waste is "hazardous," 42 U.S.C.A. Section 6921 (a), which is defined as presenting a "substantial" present or potential hazard to human health or the environment. 42 U.S.C.A. Section 6904 (5). Once the criteria are established -- as they have been, 40 C.F.R. Sections 261.10, 261.11 (1995) -- EPA must apply the criteria to identify a characteristic of hazardous waste or to list a waste as hazardous. The mixture and derived-from rules identify a broad class of wastes as hazardous without regard to the criteria established by the Agency itself. The proposed HWIR does not discuss how mixture and derived-from wastes pose a "substantial" present or potential threat to human health or the environment. The Agency does not discuss concentration levels, mobility, persistence, or any other objective factors of hazardousness that are listed in the statute or the

regulations. Just because some mixture or derived-from wastes may be toxic does not require that all such wastes should be regulated as hazardous. The Agency also identifies mixture and derived-from wastes as a "class," 60 Fed. Reg. at 66,348, partially to defuse arguments made in past litigation on these rules. Such an identification requires a finding that EPA has reason to believe that individual wastes within the class "typically or frequently" are hazardous under the definition at RCRA Section 1004 (5). 40 C.F.R. Section 261.11(b). By EPA's own past practice, this has usually meant finding that more than fifty percent of the waste "typically or frequently" meets the statutory definition of hazardousness. See, e.g., 56 Fed. Reg. 48,020 (1991). The Agency has made no finding that the majority of members of the class of mixture and derived-from wastes "typically or frequently" are hazardous. In addition, the class must have "sufficient uniformity" to apply the criteria in 40 C.F.R. Section 261.11. 45 Fed. Reg. 33,114 (1980). It is plainly obvious that the class of mixture and derived-from wastes is anything but uniform, a point admitted by EPA in 1980. 45 Fed. Reg. 33,095-96 (1980) ("the potential combinations of listed wastes and other wastes are infinite"). The class thus does not have the requisite uniformity needed to be classified as hazardous. [...]

MDF1 - Capital Returns, Inc., WHWP-00160, 3, 2 Other
EPA Must Revise the Mixture and Derived-From Rules to Address Their Overbreadth EPA is authorized under RCRA to designate as hazardous wastes and regulate under Subtitle C only those solid wastes that the Agency determines may "pose a substantial present or potential hazard to human health or the environment when improperly managed." RCRA section 1004(5); 42 U.S.C. section 6903(5). RCRA specifies that determinations of hazardousness, both for individual wastes and "combination[s] of solid wastes" (i.e., waste mixtures), must be made on the basis of the "quantity, concentration, or physical, chemical, or infectious characteristics" of the wastes. RCRA section 1004(5); 42 U.S.C. section 6903(5). In first adopting and then reissuing the mixture and derived-from rules, however, EPA did not demonstrate, and made no attempt to demonstrate, that mixture and derived-from wastes meet the statutory definition of hazardous waste. The Agency also failed to evaluate mixture and derived-from wastes against regulatory criteria established by EPA for designating RCRA hazardous wastes. See 40 C.F.R. sections 261.10, 261.11. Instead, EPA simply declared such materials hazardous wastes, even though many mixture and derived-from wastes do not contain harmful concentrations or even any detectable concentrations of hazardous constituents, and do not meet the statutory definition of hazardous waste.1/ Thus, the original 1980 rules and current interim rules are invalid. Likely as a result of EPA's failure to comply with RCRA's mandates for determining what waste mixtures and treatment residuals are hazardous wastes in promulgating the mixture and derived-from rules, these rules are fatally overbroad. EPA has long acknowledged that these rules "have resulted in unnecessarily stringent requirements for certain low risk wastes." 57 Fed. Reg. 21,450, 21,454 (May 20, 1992). Indeed, they require management of "millions of tons of mixtures and derived-from residuals" as hazardous wastes even though they "actually pose quite low hazards." Id. at 21,451. Such results clearly are unlawful in light of RCRA's mandate that EPA list as hazardous wastes only those wastes that pose a substantial risk to human health or the environment. 1/ As EPA embarked on an effort to regulate hazardous wastes in 1980, the Agency may have mistakenly believed that the mixture and derived-from presumptions were necessary. Sixteen years of experience have shown that these presumptions are unnecessary and inadvisable. Risk to human health and the environment can and must be incorporated into the system for determining whether mixture or derived-from wastes are

hazardous. [...]

MDF1 - Capital Returns, Inc., WHWP-00160, 7, 1 Other
Unfortunately, EPA's proposed approach to addressing the overbreadth of the mixture and derived-from rules and hazardous waste listings is insufficient to satisfy RCRA's statutory mandate. While Capital Returns and Abbott support EPA's efforts to provide a risk-based exit from Subtitle C for listed hazardous wastes (including mixtures and treatment residuals therefrom), Capital Returns and Abbott are concerned that the approach EPA has taken in the HWIR proposal is insufficient to satisfy RCRA's statutory mandate. EPA essentially assumes that all wastes that meet the listing description or contain or are derived from listed hazardous wastes are hazardous unless it can be demonstrated that they contain hazardous constituents in concentrations that are "clearly not hazardous." See 60 Fed. Reg. at 66,351. Under EPA's approach, many wastes that are not hazardous may unlawfully be classified as hazardous wastes, simply because they contain hazardous constituents at levels that are only slightly below levels of hazardousness, rather than far below such levels, or, as in the case of epinephrine, because the Agency has not demonstrated or cannot clearly demonstrate the non-hazardous nature of the wastes. As discussed throughout these comments, this approach is inappropriate. EPA is not authorized under RCRA to assume wastes are hazardous, thereby asserting Subtitle C jurisdiction over the wastes unless and until some demonstration is made that the wastes are "clearly not hazardous." To the contrary, EPA must demonstrate that the wastes pose a substantial risk to human health or the environment to properly assert and continue to assert Subtitle C jurisdiction over them. Accordingly, EPA must revise the regulations so that they retain within the Subtitle C regulatory scheme only those wastes that EPA can properly demonstrate pose a substantial threat to human health or the environment and thereby satisfy the statutory definition of hazardous waste.

MDF1 - American Iron and Steel Inst., WHWP-00165, 9, 4 Industry Assn.
In the preamble to the proposed HWIR rule, EPA states that it is not proposing to "modify or replace" any of the existing exemptions from the hazardous waste identification regulations, in general, and the mixture and derived-from rules, in particular, regardless of whether those exemptions are codified in the regulations or contained in policy statements or directives. 60 Fed. Reg. at 66,349. As discussed above, AISI believes that EPA should eliminate the mixture and derived-from rules entirely from the regulations. To the extent that EPA, nevertheless, decide to retain those rules, AISI agrees that the existing exemptions from the hazardous waste identification regulations should also be retained. Among the exemptions of particular concern to AISI member companies are the following: The exemption from the definition of solid waste for certain coke by-products that are recycled; The exemption from the definition of solid waste for splash condenser dross residue (SCDR) from the high temperature metals recovery (HTMR) processing of electric arc furnace (EAF) dust (EPA Hazardous Waste No. K061); The exclusion from the derived-from rule for non-wastewater residues from the HTMR processing of EAF dust, spent pickle liquor, and certain electroplating wastes; The exemptions from the mixture rule for large-volume wastewaters mixed with small quantities of certain listed hazardous wastes; The exemption from the mixture rule for wastes listed solely because they exhibit a characteristic of hazardous waste; The exclusion from the derived-from rule for precipitation runoff; The exclusion from the derived-from rule for reclaimed products; The exclusion from the derived-from rule for

lime stabilized spent pickle liquor sludge; and A number of different "delistings" for chemically stabilized EAF dust. In each case, EPA has developed the exemptions through notice-and-comment rulemaking procedures and determined that they are warranted under the RCRA regulatory scheme. In the present rulemaking, EPA has not presented any information or analysis that would undermine or refute the earlier findings. Accordingly, the Agency must retain the exemptions in the final HWIR rule. Although AISI generally supports EPA's proposal to retain the existing exemptions, it is concerned that the specific language included in the preamble to the proposed HWIR rule could be interpreted as an attempt by EPA to effectively codify some of the Agency's interpretations of the mixture and derived-from rules (or other aspects of the hazardous waste identification regulations) that are currently embodied only in policy statements or directives. AISI believes that such a "silent codification" would be unlawful and inappropriate. If EPA, in fact, intends to codify any of its policy statements or directives, it must identify the particular policies in question and explain the basis and purpose of those policies. Only in this way would the public have a meaningful opportunity to comment on the codification, as required under the Administrative Procedure Act. Because EPA has not taken any of the requisite steps, AISI believes that EPA did not intend to codify any of its policy statements or directives. Assuming this belief is correct, AISI urges EPA to state explicitly in the final HWIR rule that prior Agency policy statements and directives remain nothing more than that. In this way, any possible confusion in this regard can be avoided. If AISI's belief is not correct, EPA must provide the public with adequate notice of and opportunity to comment on any intended codification of Agency policy statements or directives.

MDF1 - American Iron and Steel Inst., WHWP-00165, 6,3 Industry Assn.
It is AISI's understanding that EPA may seek additional time to finalize the HWIR proposal so that it can refine the multipathway analysis, and other aspects of the proposed rule, to address all of the concerns expressed by the SAB, OMB, and public commenters, as well as to reflect new developments in the scientific literature and Agency policy and analysis. Although AISI certainly supports the use of the best available science and believes that it is important for EPA to respond fully to public comments, AISI is concerned that the Agency's approach is becoming an excuse for indefinite delay. Such delay is not warranted and simply cannot be tolerated any longer. [The] regulated community should never have been subjected to the unlawful and extremely burdensome requirements of the mixture and derived-from rules. Nevertheless, companies have had to comply with those requirements for over 15 years. Moreover, it has been almost five years since the original rules were overturned by the D.C. Circuit [Court] and reinstated by EPA on a supposedly temporary and emergency basis. It also has been over a year and a half since passage of the deadline that was established by Congress for revising the mixture and derived-from rules. Finally, in the litigation seeking to enforce the congressional mandate, EPA has reluctantly been granted a number of deadline extensions. In light of this lengthy history, EPA cannot reasonably ask the regulated community to continue complying with the unlawful and onerous rules beyond the current judicial deadline of February 1997. Delay is particularly inappropriate because the Agency is mistakenly engaged in what appears to be an endless and most probably futile task of trying to identify a class of mixtures and derivatives that can be demonstrated, to the ultimate degree of certainty, not to even potentially pose a threat to human health or the environment under any conceivable circumstances. [...]

MDF1 - American Iron and Steel Inst., WHWP-00165, 4, 3 Industry Assn.
The purpose of the HWIR rule is to remedy the substantive overbreadth of the mixture and derived-from rules. See, e.g., 57 Fed. Reg. 21,450, 21,452 (May 20, 1992); 60 Fed. Reg. at 66,346-47. EPA has long acknowledged that these rules "have resulted in unnecessarily stringent requirements for certain low risk wastes." Id. at 21,454. Indeed, they require management of "millions of tons of mixtures and derived-from residuals" as hazardous wastes even though they "actually pose quite low hazards." Id. at 21,451. Such results clearly are unlawful because RCRA authorizes EPA to list as hazardous wastes only those wastes that "pose a substantial present or potential hazard to human health or the environment." [...]

MDF1 - American Iron and Steel Inst., WHWP-00165, 4, 3 Industry Assn.
[...] If EPA nevertheless insists on retaining the mixture and derived-from rules, it must modify those rules so as to ensure that only wastes that pose a substantial threat to human health or the environment are classified as hazardous wastes. This goal cannot be accomplished by assuming that all wastes that contain or are derived from listed hazardous wastes are hazardous unless it can be demonstrated that they contain hazardous constituents in concentrations that are "clearly not hazardous," as EPA has proposed. See 60 Fed. Reg. at 66,351. Under such an approach, many wastes that are not hazardous may unlawfully be classified as hazardous wastes, simply because they contain hazardous constituents at levels that are only slightly below levels of hazardousness, rather than far below such levels, or because the Agency cannot clearly demonstrate the non-hazardous nature of the wastes. Instead, EPA must revise the regulations so that they retain within the Subtitle C regulatory scheme only those wastes that EPA can demonstrate pose a substantial threat to human health or the environment and thereby satisfy the statutory definition of hazardous waste.

MDF1 - Hercules Inc., WHWP-00172, 41, 1 Industry
Hercules also continues to question the legality of the "mixture and derived-from rules," 40 C.F.R. Sections 261.3(a)(2)(iv), 261.3(c)(2)(i), which are being reproposed in the HWIR proposal. 60 Fed. Reg. at 66,440. The mixture and derived-from rules will continue to apply to wastes that will not be able to exit the Subtitle C regulatory system via the HWIR. While EPA claims that the proposed HWIR will "reduce any overregulation of low-risk wastes captured by the mixture and derived-from rules," 60 Fed. Reg. at 66,346, many wastes, such as those containing toxaphene, will not be able to exit the system. As a result, many wastes that do not pose substantial, if any, risk to human health and the environment will continue to be unnecessarily subject to regulation as a hazardous waste. By indiscriminately proposing the mixture and derived-from rules, the Agency is exceeding its statutory and regulatory authority and identifying wastes as hazardous without regard to whether they pose a "substantial" present or potential hazard to human health or the environment, as is required by RCRA. 42 U.S.C.A. Section 6904(5) (West 1995). The Agency first claims that the mixture and derived-from rules are authorized by sections 3002-3004 of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C.A. Sections 6922-24, which direct regulation of hazardous wastes until they no longer pose a hazard to the public. 60 Fed. Reg. at 66,348. These sections of RCRA provide for hazardous waste management standards for generators, transporters, and treatment, storage and disposal facilities -- not for identifying hazardous wastes. That role is unambiguously carried out by section 3001. 42 U.S.C.A. Section 6921. Indeed, in previous promulgations and in litigation, EPA relied primarily on section 3001 to

justify the mixture and derived-from rules. Next, EPA claims authority for the mixture and derived-from rules from section 3001. 60 Fed. Reg. at 66,348. The Agency, however, has not followed the required procedures or made the findings required by RCRA to identify "mixture and derived-from wastes" as hazardous. Sections 3001(a) and (b) outline a two-step process for classifying wastes as hazardous. The Agency must first specify criteria to determine if the waste is "hazardous," 42 U.S.C.A. Section 6921(a), which is defined as presenting a "substantial" present or potential hazard to human health or the environment. 42 U.S.C.A. Section 6904(5). Once the criteria are established -- as they have been, 40 C.F.R. Sections 261.10, 261.11 (1995) -- EPA must apply the criteria to identify a characteristic of hazardous waste or to list a waste as hazardous. The mixture and derived-from rules identify a broad class of wastes as hazardous without regard to the criteria established by the Agency itself. The proposed HWIR does not discuss how mixture and derived-from wastes pose a "substantial" present or potential threat to human health or the environment. The Agency does not discuss concentration levels, mobility, persistence, or any other objective factors of hazardousness that are listed in the statute or the regulations. Just because some mixture or derived-from wastes may be toxic does not require that all such wastes should be regulated as hazardous. The significant and unanswered question continues to be what proportion of wastes captured by the rules also meet the criterion for hazardousness. The Agency also identifies mixture and derived-from wastes as a "class," 60 Fed. Reg. at 66,348, partially to defuse arguments made in past litigation on these rules. Such an identification requires a finding that EPA has reason to believe that individual wastes within the class "typically or frequently are hazardous" under the definition at RCRA Section 1004(5). 40 C.F.R. Section 261.11(b). By EPA's own past practice, this has usually meant finding that more than fifty percent of the waste "typically or frequently" meets the statutory definition of hazardousness. See, e.g., 56 Fed. Reg. 48,020 (1991). The Agency has made no finding that the majority of members of the class of mixture and derived-from wastes "typically or frequently" are hazardous. In addition, the class must have "sufficient uniformity" to apply the criteria in 40 C.F.R. Section 261.11. 45 Fed. Reg. 33,114 (1980). It is plainly obvious that the class of mixture and derived-from wastes is anything but uniform, a point admitted by EPA in 1980. 45 Fed. Reg. 33,095-96 (1980) ("the potential combinations of listed wastes and other wastes are infinite"). The class thus does not have the requisite uniformity needed to be classified as hazardous. [...]

MDF1 - Merck & Co., Inc., WHWP-00173, 1, 2 Industry
Merck applauds the Agency on undertaking the task of developing criteria for exit from the hazardous waste system. Yet, this rule which was driven by the Shell Oil Decision in which the court held that EPA had violated the Administrative Procedures Act with respect to the Mixture and Derived from (MDF) rules, does nothing to fundamentally reform these rules. The MDF rules form one of the basic tenets of the Subtitle C hazardous waste system but at the same time they also result in many high volume, low risk wastes staying in the system. [...]

MDF1 - National Coil Coaters Assn., WHWP-00192, 6, 1 Industry Assn.
EPA Must Revise the Mixture and Derived-From Rules to Address Their Overbreadth. EPA is authorized under RCRA to designate as hazardous wastes and regulate under Subtitle C only those solid wastes that the Agency determines may "pose a substantial present or potential hazard to human health or the environment when improperly managed." RCRA Section 1004(5); 42 U.S.C. Section 6903(5). RCRA specifies that determinations of hazardousness, both for individual wastes

and "combination[s] of solid wastes" (i.e., waste mixtures), must be made on the basis of the "quantity, concentration, or physical, chemical, or infectious characteristics" of the wastes. RCRA Section 1004(5); 42 U.S.C. Section 6903(5). In first adopting and then reissuing the mixture and derived-from rules, however, EPA did not demonstrate, and made no attempt to demonstrate, that mixture and derived-from wastes meet the statutory definition of hazardous waste. The Agency also failed to evaluate mixture and derived-from wastes against regulatory criteria established by EPA for designating RCRA hazardous wastes. See 40 C.F.R. Sections 261.10, 261.11. Instead, EPA simply declared such materials hazardous wastes, even though many mixture and derived-from wastes do not contain harmful concentrations or even any detectable concentrations of hazardous constituents, and do not meet the statutory definition of hazardous waste.1/ Thus, the original 1980 rules and current interim rules are invalid. Likely as a result of EPA's failure to comply with RCRA's mandates for determining what waste mixtures and treatments residuals are hazardous wastes in promulgating the mixture and derived-from rules, these rules are fatally overbroad. EPA has long acknowledged that these rules "have resulted in unnecessarily stringent requirements for certain low risk wastes." 57 Fed. Reg. 21,450, 21,454 (May 20, 1992). Indeed, they require management of "millions of tons of mixtures and derived-from residuals" as hazardous wastes even though they "actually pose quite low hazards." Id. at 21,451. Such results clearly are unlawful in light of RCRA's mandate that EPA list as hazardous wastes only those wastes that pose a substantial risk to human health or the environment. 1/ As EPA embarked on an effort to regulate hazardous wastes in 1980, the Agency may have mistakenly believed that the mixture and derived-from presumptions were necessary. Sixteen years of experience have shown that these presumptions are unnecessary and inadvisable. Risk to human health and the environment can and must be incorporated into the system for determining whether mixture or derived-from wastes are hazardous. [...]

MDF1 - National Coil Coaters Assn., WHWP-00192, 11, 1 Industry Assn.
[EPA's proposed approach to addressing the overbreadth of the mixture and derived-from rules and hazardous waste listings is insufficient to satisfy RCRA's statutory mandate.] While NCCA supports EPA's efforts to provide a risk-based exit from Subtitle C for listed hazardous wastes (including mixtures and treatment residuals therefrom), NCCA is concerned that the approach EPA has taken in the HWIR proposal is insufficient to satisfy RCRA's statutory mandate. EPA essentially assumes that all wastes that meet the listing description or contain or are derived from listed hazardous wastes are hazardous unless it can be demonstrated that they contain hazardous constituents in concentrations that are "clearly not hazardous." See 60 Fed. Reg. at 66,351. Under this approach, many wastes that are not hazardous may unlawfully be classified as hazardous wastes, simply because they contain hazardous constituents at levels that are only slightly below levels of hazardousness, rather than far below such levels, or because the Agency has not demonstrated or cannot clearly demonstrate the non-hazardous nature of the wastes. [T]his approach is inappropriate. EPA is not authorized under RCRA to assume wastes are hazardous, thereby asserting Subtitle C jurisdiction over the wastes unless and until some demonstration is made that the wastes are "clearly not hazardous." To the contrary, EPA must demonstrate that the wastes pose a substantial risk to human health or the environment to properly assert and continue to assert Subtitle C jurisdiction over them. Accordingly, EPA must revise the regulations so that they retain within the Subtitle C regulatory scheme only those wastes that EPA can properly

demonstrate pose a substantial threat to human health or the environment and thereby satisfy the statutory definition of hazardous waste.

MDF1 - Beazer East, Inc., WHWP-00196, 4, 1 Waste Mgmt Co
The Proposed Rule would leave the existing Mixture Rule and Derived-From Rules intact even though it allows mixtures to remain hazardous that should not be subjected to onerous Subtitle C requirements. EPA's Mixture and Derived-From Rules, promulgated in 1980, failed to consider the quantity, concentration or physical, chemical or infectious characteristic of the waste. 45 Fed. Reg. 33066 (May 19, 1980). Rather, these regulations merely provided that any solid waste mixed with or derived-from a listed hazardous waste, no matter how low in concentration, would be characterized as a hazardous waste. 40 C.F.R. Section 261.43(a)(2)(iv) and 40 C.F.R. Section 261.3(c)(2)(i). The original Mixture and Derived-From Rules were vacated on procedural grounds by the Court of Appeals for the D.C. Circuit in December 1991. Shell Oil Corp. v. EPA, 959 F.2d 741 (D.C. Cir. 1991). In response, EPA promulgated an emergency rule allegedly reinstating the Mixture and Derived-From Rules as interim Final Rules on March 3, 1992. 57 Fed. Reg. 7628. The Proposed Rule has been developed to replace the interim Final Rule promulgated in 1992. EPA, however, is retaining the Mixture and Derived-From Rules without further revisions. 60 Fed. Reg. 66348. It is the Agency's position that its determination of exit levels provides a basis for believing that wastes which remain within the scope of the Mixture and Derived-From Rules pose threats warranting regulation. Id. This position is arbitrary and capricious for two major reasons. First, EPA has failed to evaluate mixtures and "derived-from" wastes in accordance with its statutory mandate. RCRA authorizes EPA to designate as hazardous waste, those solid wastes that the Agency determines may (1) cause, or significantly contribute to, an increase in mortality or serious illness, or (2) pose a substantial present or potential hazard to human health or the environment when improperly managed. 42 U.S.C. Section 6903(5). The statute requires EPA to determine whether an individual waste or "combination of solid wastes" is hazardous based on the "quantity, concentration or physical, chemical or infectious characteristics" of the waste. Id. To date, contrary to the mandate of its implementing statute, EPA has characterized wastes as hazardous without determining whether the waste presents a substantial or potential hazard to human health or the environment if improperly managed. [...]

MDF1 - Beazer East, Inc., WHWP-00196, 4, 1 Waste Mgmt Co
[...] In reality, EPA's Proposed Rule provides little or no relief to the regulated community, is still outside of its authority as decided in Shell Oil, and as a practical matter, is no different than the rules proposed in 1980. EPA's regulation of such waste was invalid then and remains invalid today. RECOMMENDATION: Beazer recommends that EPA either reevaluate the exemption levels presented in the Proposed Rule to reflect more accurately the risks posed by mismanagement of such wastes and revise the proposed administrative calisthenics, especially the sampling and analytical requirements, to make the exemption practically and economically accessible to generators or completely eliminate the mixture and derived-from concepts from the Agency's regulations and policies.

MDF1 - Eli Lilly and Co., WHWP-00201, 15, 2 Industry
[...]The regulated community should never have been subjected to the unlawful and extremely

burdensome requirements of the mixture and derived-from rules in the first place. Nevertheless, companies have had to comply with those requirements for over 15 years. Moreover, it has been almost five years since the original rules were overturned by the D.C. Circuit and reinstated by the Agency on a supposedly temporary and emergency basis. It has also been over a year and a half since passage of the deadline that was established by Congress for revising the mixture and derived-from rules. Finally, in the litigation seeking to enforce the congressional mandate, the Agency has reluctantly been granted a number of deadline extensions. In light of this lengthy history, the Agency cannot reasonably ask the regulated community to continue complying with the unlawful and onerous rules. The time for action is now. [...]

MDF1 - Eli Lilly and Co., WHWP-00201, 2,1 Industry

[...] The current derived-from rule is unlawful and must be modified because the Agency has failed to demonstrate that derived-from wastes meet the statutory definition of hazardous waste. The Agency asserts in the proposed HWIR that it has statutory authority to promulgate the derived-from rule. 60 Fed. Reg. 66348 Lilly believes that the derived-from rule is not supported by statutory authority, is overbroad and sweeps in many wastes which do not meet the statutory definition of hazardous wastes and that pose minimal or no threat to the environment and public health. The derived-from rule misdirects expenditures which should be channeled toward environmentally beneficial projects and activities. The Agency is authorized under RCRA to designate as hazardous waste only those solid wastes that the Agency determines may (1) cause, or significantly contribute to an increase in mortality or serious illness, or (2) pose a substantial present or potential hazard to human health or the environment when improperly managed. 42 U.S.C. Section 6903(5). It is essential to note that Congress did not intend to regulate every conceivable hazard from solid waste materials under RCRA Subtitle C. RCRA hazardous wastes are only a subset of the broad universe of solid wastes generated by commercial, industrial and residential sources. Congress clearly understood that not every possible risk from solid waste disposal would be regulated under the Subtitle C program. The Agency can regulate under Subtitle C only those solid wastes that the Agency determines pose substantial hazards under Section 1004(5) of RCRA. See, American Mining Congress v. EPA, 824 F.2d 1177,1179 (D.C. Cir. 1987). In first adopting and then reissuing the mixture and derived-from rules, however, the Agency made no attempt to demonstrate that derived-from wastes meet the statutory definition of hazardous waste. The Agency has also failed to measure derived-from wastes against the regulatory criteria it has established for designating RCRA hazardous wastes. See 40 CFR Sections 261.10, 261.11. Instead the Agency simply made conclusory statements that these materials are hazardous waste, even though many derived-from wastes do not contain harmful concentrations or even detectable concentrations of any hazardous constituents, and do not meet the statutory definition of hazardous waste. Thus, the derived-from rule is not a legally valid approach to regulating materials which result from treatment of hazardous waste. In contrast to the statutory requirement that only wastes which pose substantial risks be regulated under RCRA Subtitle C, the Agency has admitted that many derived-from wastes pose little risk to human health or the environment. Yet, in contrast to the statutory and regulatory definitions of hazardous waste, the proposed HWIR requires the waste generator to demonstrate that the derived-from waste poses absolutely no threat before it can exit from the RCRA regulatory system. Many solid wastes, and indeed many foods 1/, would fail to meet the very stringent exit criteria established under the proposed HWIR. This result is not what Congress intended in establishing the hazardous waste

program under RCRA; Congress intended only to regulate wastes which pose substantial risks under Subtitle C, while allowing other solid wastes to be disposed at Subtitle D facilities not subject to federal jurisdiction. 3. The derived-from rule is counterintuitive and the Agency's concern with a "loophole" in the hazardous waste regulatory system is unfounded. The derived-from rule was adopted by the Agency in 1980 with its first set of comprehensive hazardous waste management regulations. 45 Fed. Reg. 33066 (May 19, 1980). The rationale for the derived-from rule was apparently two-fold. First, the Agency was concerned that without such a rule there would be a potential "loophole" in the regulation of hazardous waste. As restated in the current proposed HWIR rule: [W]ithout a derived-from rule, hazardous waste generators and owners and operators of hazardous waste treatment, storage and disposal facilities (TSDFs) could potentially evade regulation by minimally processing or managing hazardous waste and claiming 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. 66348 (December 21, 1996); see also, 57 Fed. Reg. 7628 (March 3, 1992) (interim final rule reinstating the derived-from rule). Secondly, the Agency stated that it was not in a position in 1980 to specify "waste-specific treatment standards which would identify those processes which do and do not render wastes or treatment residues NonHazardous." 45 Fed. Reg. 33096. The derived-from rule was defended as "the best regulatory approach we can devise." Id.; see also, Shell Oil Co. v. EPA, 950 F. 2d 741, 750 (D.C. Cir. 1991). As discussed below, Lilly believes that neither of these reasons, to the extent that they were valid in 1980, is a valid reason for perpetuating the mixture and derived-from rules in 1996. The Agency should simply acknowledge that its original regulations were overbroad and without statutory authority, and provide waste generators the appropriate relief from these burdensome and unnecessary regulations. a. The derived-from rule unlawfully extends to treatment residuals, which should be evaluated on the same basis as other hazardous wastes. [...]

MDF1 - Eli Lilly and Co., WHWP-00201, 2,1 Industry
[...] The Agency cites the Chemical Waste Management decision, 976 F.2d (D.C. Cir. 1992) as support for its belief that the proposed HWIR rule is within its Subtitle C jurisdiction under RCRA. In the Chemical Waste Management case, the court overturned the Agency's reasonable regulatory interpretation that wastes no longer need to be subject to RCRA regulation when the waste poses very little risk. Congress has recently repudiated the Court's interpretation of RCRA by its adoption of H.R. 2036 (104th Cong. 2d session, 1996). Congress praised the Agency's efforts to shape RCRA with common sense solutions and to eliminate needless investment of money in treatment technologies where there is little environmental benefit. See, e.g., 142 Cong. Rec. H 1965 (104th Cong., 2d Session, March 7, 1996). This is probably the best example you can imagine of good, bipartisan cooperation with the administration, getting rid of unworkable regulations that are costly and ineffective. . . . We must make fundamental reforms to ensure that our regulatory programs address realistic and significant risks through cost effective and cost reasonable means. There is much work to be done. Remarks of Rep. Oxley, 142 Cong. Rec. H 942 (104th Cong., 2d. Sess. Jan. 30, 1996). The debate in the Land Ban Phase III rule centers on regulation of underlying hazardous constituents in wastewaters which formerly exhibited one or more characteristics of hazardous waste, but that no longer exhibit that characteristic (so-called decharacterized wastewaters). The Agency correctly believed that there was no need to regulate these decharacterized wastewaters under RCRA, and Congress clearly agrees. The issue of

regulating residuals from treatment of listed hazardous wastes is very similar. Once the waste has undergone the treatment process, the waste is no longer the listed waste, and there is no need to continue to regulate the waste under Subtitle C. Based on the clear signal from Congress for common sense reform of RCRA regarding the decharacterized waste water, the modification of the derived-from rule to recognize that permitted RCRA treatment processes effectively eliminate the basis for the listing should be supported by Congress and the Agency. [...]

MDF1 & MDF2 - Eli Lilly and Co., WHWP-00201, 2,1 Industry
[...] The derived-from rule has no basis in fact and causes treatment residues from RCRA permitted treatment facilities to be managed in a very costly and inefficient manner. The derived-from rule is found in two section of the RCRA regulations which identify and list hazardous waste (40 CFR 261.3): (c) Unless and until it meets the criteria of paragraph (d) of this section: (1) A hazardous waste will remain a hazardous waste. (2)(i) Except as otherwise provided in paragraph (c)(2)(ii) of this section, any solid waste generated from the treatment, storage or disposal of a hazardous waste, including any sludge, spill residue, ash emission control dust, or leachate (but not including precipitation run-off) is a hazardous waste .... (d) Any solid waste described in paragraph (c) of this section is not a hazardous waste if it meets the following criteria: (2) In the case of a waste which is a listed waste under subpart D of this part, contains a waste listed under subpart D of this part or is derived from a waste listed in subpart D of this part, it also has been excluded from paragraph (c) of this section under Sections 260.20 and 260.22 of this chapter. Thus, no matter what steps a generator takes to treat a listed hazardous waste, the waste can never be considered as anything but that listed waste unless the Agency reviews that waste stream through the delisting process. In practical terms, waste generators must continue to assign the listed waste code to any residues derived-from the treatment of a listed waste. Lilly utilizes many organic solvents in its pharmaceutical manufacturing operations. Many of these solvents are listed hazardous waste, such as spent solvents (F001-F005) or P-listed or U-listed commercial chemical products. Lilly has three manufacturing plants which have RCRA-permitted hazardous waste combustion units. Lilly uses these RCRA units to provide highly controlled, on-site management of wastes from its pharmaceutical manufacturing operations. In accordance with the RCRA permit and regulations, Lilly achieves 99.99% destruction of the organic solvents in these waste streams. However, despite the fact that the listed organics are effectively destroyed by the treatment process, the listed waste codes "carry through" the treatment process and attach to the treatment residues (e.g., scrubber water and ash). The residuals are no longer the waste which was listed, e.g., a spent solvent, yet the scrubber water and the ash continue to be designated as listed spent solvents. The derived-from rule is a legal fiction: even though the listed waste no longer exists, the treatment residuals must be managed as if the treatment had not occurred. The waste code carry-through required by the derived-from rule has the potential to create absurd results. If one of the listed codes that attached to the waste has an Land Disposal Restriction (LDR) technology standard of CMBST (incinerate or combust), the owner will be required to meet that technology before land disposal. If the owner is treating the scrubber water in a tank-based waste water treatment system, the sludge from the WWT system will also carry the listed codes of the incineration scrubber water. As shown in the diagram in Attachment A, this results in either incineration of WWTP sludge or incineration of the scrubber water. This is clearly treatment for treatment's sake. [Note: See hardcopy of WHWP-00201 to review Attachment A.] Lilly's

experience with its permitted hazardous waste incinerators is that the organic solvents which are the basis of the F, P and U listing for the wastes incinerated are not present at levels of concern in the scrubber water or the incinerator ash. If the residuals from the treatment process were evaluated against the regulatory requirements for hazardous waste, as Lilly believes they should be, rather than being subject to the legal fiction of the derived-from rule, the residuals would not need to be managed as hazardous waste. [...]

MDF1 - Environmental Technology Council, WHWP-00204, 6, 2 Waste Mgmt. Assn.
The ETC agrees that EPA had statutory authority under RCRA to promulgate the mixture and derived-from rules in 1980, and that the agency also has ample authority to retain the basic rules now without change. See page 66348, col. 2. [. . .] The mixture and derived-from rules ensure that hazardous wastes that are mixed with other wastes or that are treated is some fashion do not escape regulation so long as they are reasonably likely to continue to pose threats to human health and the environment. The rules are consistent with EPA's legal authority under RCRA section 3001 to determine when wastes are hazardous based on listing criteria, and under RCRA sections 3002-3004 to impose regulatory standards until wastes have "ceased[d] to pose a hazard to the public." Shell Oil Corp. v. EPA, 959 F.2d 741, 754 (D.C. Cir. 1991). The ETC believes that the mixture and derived-from rules provide a very important safety net for the RCRA regulatory program.

MDF1 - GPU Nuclear Corp., WHWP-00208, 1,1 Utility Co/Assn.
GPUN opposes EPA's proposal to retain the mixture and derived-from rules. That being the automatic assumption that any waste (or material) mixed with or derived-from a "listed" waste possesses a similar chemical identity requiring regulation as a listed hazardous waste is factually incorrect and legally indefensible.

MDF1 - Jersey Central P&L Co., WHWP-00220, 3, 3 Utility Co/Assn.
JCP&L opposes EPA's proposal to re-promulgate the mixture and derived-from rules. The Agency has not established an adequate record demonstrating that such wastes (i.e., those mixture and derived-from wastes that do not qualify for the HWIR exit levels) meet the statutory definition of "hazardous waste." As such, the Agency should not proceed with its proposal to continue with these overbroad rules.

MDF1 - General Public Utilities, WHWP-00239, 3, 5 Utility Co
GPU opposes EPA's proposal to re-promulgate the mixture and derived-from rules. The Agency has not established an adequate record demonstrating that such wastes (i.e, those mixture and derived-from wastes that do not qualify for the HWIR exit levels) meet the statutory definition of "hazardous waste." As such, the Agency should not proceed with its proposal to continue with these overly broad rules.

MDF1 - Bethlehem Steel Corp., WH2P-00004, 10, 1 Industry
EPA’s proposal does not mention the statutory definition of hazardous waste at 42 U.S.C. § 6903(5). This definition requires in relevant part that a waste cause, or significantly contribute to, an increase in mortality or an increase in serious, irreversible. . . illness to be classified as

hazardous. This definition supports the recommendations in this letter because it shows that low risk wastes were never intended to be labeled hazardous.

MDF1 - Bethlehem Steel Corp., WH2P-00004, 10, 7 Industry
EPA should identify the emergency that it believes provides authority for the mixture and derived-from rules in their current, interim form.

MDF1 - Bethlehem Steel Corp., WH2P-00004, 8, 1 Industry
43. EPA's mixture rule is an interim regulation that classifies as hazardous a potentially infinite variety of waste mixtures. 40 C.F.R. § 261.3(a)(2). 44. EPA first issued the regulation in 1980 without public notice and comment. Because of this lack of public comment, the rule was vacated in 1992. Shell Oil Co. v. EPA, 950 F.2d 741 (D.C. Cir. 1991). § 553(b). on an emergency basis. 64 Fed. Reg. at 63389. The agency does not identify the nature of this emergency, which has now extended for eight years since the date of the rule's interim promulgation in 1992. 47. In the HWIR proposal, EPA devotes less than one full page (out of an 80-page notice) to its decision to retain the mixture rule. 64 Fed. Reg. at 63389-90. 48. The agency's discussion does not appear to identify any damage incidents associated with mixed wastes where the wastes do not also exhibit a hazardous characteristic (and so would be classified as hazardous anyway). [...]

MDF1 - Bethlehem Steel Corp., WH2P-00004, 10, 8 Industry
EPA has failed to analyze the costs and compliance burdens associated with the mixture rule and derived-from rules. EPA may not evade its legal obligation to perform these analyses by adopting the rules in interim form, and then claiming that finalization of the same rules creates no new regulatory costs or burdens.

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. [...]

MDF1 - General Electric Corp., WH2P-00005, 3, 1 Industry
GE Continues To Question The Legal and Environmental Basis for The Mixture and Derived From Rules Despite the fact that the mixture and derived-from rules have existed since 1980, they were promulgated without sufficient analysis or public comment and with disregard for statutory provisions addressing hazardous waste identification. Shell Oil Co. v. EPA, 950 F.2d at 752 (D.C. Cir. 1991). In the many years since their initial promulgation these fundamental flaws have not been remedied. RCRA sections 3001 (a) and (b) require EPA to follow a specific two-step process for identifying hazardous wastes. First, EPA must specify criteria to determine whether a waste poses a substantial hazard. Second, EPA must apply those criteria to particular waste streams by promulgating hazardous waste characteristics or listings. EPA's imposition of the mixture and derived-from rules ignored this precise statutory blueprint by declaring all mixtures of listed hazardous waste and solid waste, and all residuals from the treatment of hazardous wastes, to be hazardous wastes by fiat. These rules were imposed without regard to whether specific mixtures or residuals pose health or environmental hazards. Yet EPA continues to assert that the

mixture and derived from rules are necessary to regulate hazardous wastes in a way that protects human health and the environment since many wastes are still toxic after having been incorporated into mixtures or treated. (64 FR 63389, November 19, 1999). Since EPA does not, and in fact likely could not, evaluate all or even most potential mixtures or treatment residues in the process of listing hazardous wastes, there has been insufficient public review of the merits of EPA's arguments and data, particularly in association with notices justifying the mixture and derived-from rules. Experience in the industrial community over the years suggests that few such mixtures or treatment residuals contain concentrations of hazardous constituents that pose a potential threat that rises to level of requiring handling under the stringent controls applied to hazardous wastes. The Agency contends (64 FR 633 89,November 19, 1999) that without a mixture rule generators could escape regulatory requirements by mixing listed wastes with other wastes to create a material that no longer meets the listing. EPA's apprehension about theoretically possible behavior by hazardous waste generators is better addressed by enforcement of the remaining body of current regulations than by creating unnecessary controls on hazardous waste mixtures and treatment residuals. Also, there are two major regulatory impediments to this occurring that the Agency does not recognize. This kind of mixing would meet the broad regulatory definition of treatment found at 40 C.F.R. 260.10, and is thus prohibited in many situations without a hazardous waste treatment permit and a waste analysis plan since hazardous waste identification is properly made at the point of generation. Second, the Land Disposal Restrictions (LDRs) impose a set of strict antidilution rules to ensure waste are properly treated and not merely diluted to meet levels or methods of treatment that represent the best available technologies. These BDAT treatment requirements and dilution rules apply at the point of generation, so even if subsequent mixing results in the waste becoming NonHazardous, the waste is still required to meet the treatment standards. Also, many wastes are required to undergo treatment for underlying hazardous constituents (UHCs), another safeguard for ensuring the waste poses little hazard to human health and the environment. Combined, these regulations prevent increased loading of toxics to the environment from characteristic wastes even if they are mixed and no longer exhibit a characteristic. Thus, the type of mixing EPA expresses concern about are already either prohibited or regulated if the current regulations are enforced. Illegal acts no doubt occur. However, EPA should use its considerable enforcement authorities to deter and enforce against such activities rather than imposing unnecessary regulations based on the assumption that the industrial community will go to extraordinary measures to avoid compliance. [...]

MDF1 - TXU Business Services, WH2P-00008, 1, 2 Utility Co/Assn.
TXU does not believe the re-promulgation of the mixture and derived-from rules is necessary. We believe EPA has failed to demonstrate that such wastes meet the statutory definition of hazardous waste. Large categories of waste would be classified as hazardous based solely on the wastes' prior history, without any specific consideration of concentration levels, toxicity, mobility, persistence or any other objective factor for establishing the wastes' potential hazard as required in RCRA sections 3001(a) and (b) for identifying or listing hazardous wastes or EPA's identification or listing criteria at 40 CFR § 261.10 and § 261.11. The elimination of the mixture and derived-from rules would not create a loophole in the RCRA waste management system. Like all other waste generated, these wastes are subject to Subtitle C regulation if they exhibit a hazardous characteristic.

MDF1 - USWAG, WH2P-00010, 3, 3 Utility Co/Assn.
USWAG has been actively involved in the rulemaking proceedings and litigation surrounding these contentious rules since the 1978 proposal, and USWAG is one of two plaintiffs in the consolidated deadline suit case, Environmental Treatment Council v Browner, C.A. No. 94-2346 (TFH) (D.D.C.), which led to the consent decree that established EPA's obligations in this rulemaking In these comments, USWAG reiterates its opposition to the mixture and derived-from rules, which are unnecessarily broad and are inconsistent with the statutory definition of hazardous waste. These comments also set forth USWAG's recommendations for modifications to EPA's proposal, should EPA insist on repromulgation. In sum, USWAG recommends the following: EPA should not retain the existing mixture rule and derived-from rules.

MDF1 - USWAG, WH2P-00010, 4, 7 Utility Co/Assn.
The Rulemaking Record Does Not Support the Re-Promulgation of the Mixture and Derived-From Rules. USWAG opposes the re-promulgation of the mixture and derived-from rules because the Agency has failed to demonstrate on the record that such wastes meet the statutory definition of hazardous waste. Rather, the Agency supports its proposal to re-promulgate the rules (in a slightly modified form) and establish a huge category of regulated hazardous wastes based simply on its unsubstantiated conclusion that t]he mixture and derived-from rules are necessary to regulate hazardous wastes in a way that protects human health and the environment. 64 Fed. Reg. at 63389. EPA's assertion of necessity falls woefully short of the exacting standards required under RCRA to declare a waste hazardous and to subject it to the rigors of the Subtitle C system. As the Agency is well aware, a solid waste may be classified as a hazardous waste only if, because of its quantity, concentration, or physical, chemical or infectious characteristics, [it] 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) (emphasis added). The substantial hazard criterion is the fundamental element of the statutory definition of hazardous waste. See, e.g., 40 C.F.R. §§ 261.10 and 261.11. Here, however, EPA has presented no basis in the rulemaking record supporting the position that all mixture and derived-from wastes pose a substantial hazard warranting their designation as hazardous wastes as that term is defined under the statute. Instead, EPA merely refers generally to its experience in identifying and regulating hazardous waste during the listing process and to its experience with delisting petitions as if knowledge and experience with a handful of chemicals provides sufficient justification for the blanket application of these broad rules. 64 Fed. Reg. at 63889. EPA's assertions run counter to past Agency statements that the mixture and derived-from rules unnecessarily sweep wastes that pose little or no risk into the hazardous waste regulatory system. EPA has presented no explanation or evidence to support this change in position, and the Agency's naked assertions of legal authority and appropriateness (see, e.g., id. at 63390) do not provide adequate justification for its proposed actions. The re-promulgation of the mixture and derived-from rules would continue to declare enormous categories of waste to be hazardous by fiat without any specific consideration of concentration levels, mobility, persistence or any other objective factor required in RCRA sections 3001(a) and (b) for identifying or listing hazardous wastes or EPA's identification or listing criteria at 40 C.F.R. §§ 261.10 and 261.11. EPA's references to its experience garnered in the process of listing and delisting specific waste streams and in developing the LDR treatment program does not establish that such wastes are likely to test hazardous, which is a fundamental

criterion under the Agency's own listing regulations and which has been interpreted by EPA to mean that at least 50 percent of the subject wastes exhibit some or all of the Agency's listing criteria set forth at § 261.11(a). See, e.g., 56 Fed. Reg. 48020 (Sept. 23, 1991); 45 Fed. Reg 33114 (May 19, 1980) (a class of wastes may be listed generically so long as most of the wastes in the class are hazardous) (emphasis added). There is no indication that EPA has collected or analyzed any samples or otherwise attempted to demonstrate that 50 percent -- or any substantial percentage -- of mixtures or treatment residues meet any of the specific listing criteria set forth in 40 C.F.R. § 261.11(a). EPA's declaration that [m]any hazardous wastes continue to be toxic after they have been mixed with other waste or have been treated (64 Fed. Reg. at 63389) and references to agency expertise acquired through other regulatory actions cannot, by themselves, create the factual record necessary for rendering a listing determination for all mixtures or treatment residuals. While some mixtures and treatment residues may present some hazards under some conditions, it certainly does not follow nor has EPA demonstrated on this record -- that most (i.e., over 50%) mixtures and residues will pose a substantial hazard (e.g., exceed health-based constituent concentration levels by 100-1000 times), even if mismanaged. EPA simply has not established an adequate record for re-promulgating the mixture and derived-from rules. Furthermore, mixture and derived-from wastes do not qualify as the type of class that EPA may list as hazardous under section 261. As EPA has acknowledged, to list a class or category of wastes as hazardous, the class itself must have sufficient uniformity to enable EPA to rationally apply the section 261.11(a) listing criteria to the members of that class and to determine whether they are typically or frequently hazardous. 45 Fed. Reg. 33114 ([t]he Agency...must demonstrate that sufficient uniformity exists or is likely to exist.). There is little question that the universe of mixtures and treatment residues potentially subject to the mixture and derived-from rules is virtually infinite and enormously diverse. Thus, USWAG believes that there is not sufficient uniformity among the countless combinations of wastes potentially covered by the mixture and derived from rules to justify listing such wastes as a class under section 261.11. In any event, the elimination of the mixture and derived-from rules would not create a loophole in the RCRA system. EPA has, and always has had, lawful and adequate alternatives to protect human health and the environment. Mixture and derived-from wastes, like all other wastes generated, are subject to Subtitle C regulation if they exhibit a hazardous characteristic. Since 1980, EPA has also had the authority to adopt more or broader hazardous waste listings to capture distinct categories of mixture and derived-from wastes that truly warrant hazardous waste regulation (i.e., those categories that typically and frequently test hazardous). If, indeed, EPA's concern is that some generators would alter their waste to the point it no longer meets the listing description without detoxifying, immobilizing, or otherwise actually treating the waste (64 Fed. Reg. at 63389), then EPA could craft an appropriately tailored regulatory prohibition on mixing for such purposes. Thus, from the perspective of human health and the environment, there is little rationale for continuing these overly broad rules. For all of the above reasons, USWAG opposes EPA's proposal to re-promulgate the mixture and derived-from rules. If EPA chooses to promulgate the proposed language, the Agency will risk a judicial determination that the rules are overly broad, not in conformity with the statutory definition of hazardous waste, and hence arbitrary and capricious.

As a preliminary matter, NEDA RCRA disagrees with EPA's characterization of the original mixture and derived-from rules as valid exercises of EPA's authority under RCRA. These rules subject vast quantities of waste to unnecessarily stringent regulation without any demonstration that the wastes meet the criteria for identification as a hazardous waste. As such, the original rules were not valid extensions of EPA's RCRA authority.

MDF1 - Phillips Petroleum Company, WH2P-00014, 2, 2 Industry
Phillips disagrees with EPA's characterization of the original mixture and derived-from rules as valid exercises of EPA's authority under RCRA. These rules subject vast quantities of waste to regulation without any demonstration that the wastes meet the criteria for listing a waste as hazardous under RCRA. That said, Phillips supports the proposed revisions to the mixture and derived-from rules as a first-step means to limit their overbroad scope. Phillips believes that the large and unproductive effort that EPA is currently undertaking to establish a concentration-based exit system for hazardous waste indicates that a concentration-based exit approach is too complicated. Instead, Phillips believes that EPA should address the overbreadth of the mixture and derived-from rules in a different way. Rather than determining exit criteria for listed hazardous wastes (i.e. generically what concentration levels in waste denote a hazardous waste), EPA could exclude certain wastes from the definition of hazardous waste based on the way that they are managed. In limited ways EPA has been excluding wastes from regulation contingent on proper management nearly since the inception of the program. For example, in 1981, EPA decided that mixtures of certain solvents should not be regulated as a hazardous waste if they were managed in wastewater treatment units that are regulated by the Clean Water Act. 40 C.F.R. § 261.3(a)(2)(iv)(A) and (B). Likewise, EPA has excluded releases of de minimis quantities of certain listed wastes if they are properly managed. 40 C.F.R. § 261.3(a)(2)(iv)(D). In addition, EPA has excluded waste derived residues from its definition of hazardous waste if it meets certain health-based limits. See 40 C.F.R. §266.112, Appendix VII. EPA has also excluded treatment residues derived from the aggressive biological treatment of petroleum refinery wastewaters. See 40 C.F.R. § 261.31 (F037 listing). [...]

MDF1 - Virginia Power, WH2P-00016, 2, 1 Utility Co./Assn.
RE-PROMULGATION OF THE "MIXTURE AND DERIVED-FROM" RULE Virginia Power disagrees with the EPA's position on re-promulgation of the "Mixture and Derived-From" rule because the rule does not adhere to the regulatory definition of hazardous waste. The "Mixture and Derived-From" rule simply creates an enormous category of hazardous wastes, created by the absence of applying the criterion cited in 40 CFR § 261.10 and 261.11. Virginia Power urges EPA to reconsider its position on the re-promulgation of the "Mixture and Derived-From" rule.

MDF1 - Duke Power, WH2P-00022, 2, 4 Utility Co/Assn.
In these comments, Duke Power reiterates its opposition to the mixture and derived-from rules, which are unnecessarily broad and do not comply with the definition of hazardous waste. These comments also set forth Duke Power's recommendations for modifications to EPA's proposal, should EPA insist on re-promulgation. In sum, Duke Power recommends the following: EPA

should not retain the existing mixture rule and derived-from rules.

MDF1 - Duke Power, WH2P-00022, 3, 5 Utility Co/Assn.
The Rulemaking Record Does Not Support the Re-Promulgation of the Mixture and Derived-From Rules. Duke Power opposes the re-promulgation of the mixture and derived-from rules because the Agency has failed to demonstrate on the record that such wastes meet the statutory definition of hazardous waste. Rather, the Agency supports its proposal to repromulgate the rules (in a slightly modified form) and establish a huge category of regulated hazardous wastes based simply on its belief that [t]he mixture and derived-from rules are necessary to regulate hazardous wastes in a way that protects human health and the environment. 64 Fed. Reg. at 63389. EPA's assertion of necessity falls woefully short of the exacting standards required under RCRA to declare a waste hazardous and subject it to the rigors of the Subtitle C system. As the Agency is well aware, a solid waste may be classified as a hazardous waste only if, because of its quantity, concentration, or physical, chemical or infectious characteristics, [it] 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) (emphasis added). The substantial hazard criterion is the fundamental element of the statutory definition of hazardous waste. See, e.g., 40 C.F.R. §§ 261.10 and 261.11. Here, however, EPA has presented no basis in the rulemaking record supporting the position that all mixture and derived-from wastes pose a substantial hazard warranting their designation as hazardous wastes as that term is defined under the statute. Instead, EPA merely refers generally to its experience in identifying and regulating hazardous waste during the listing process and to its experience with delisting petitions as if knowledge and experience with a handful of chemicals provides sufficient justification for the blanket application of these broad rules. 64 Fed. Reg. at 63889. EPA's assertions of legal authority and appropriateness (see, e.g., id. at 63390) do not provide adequate justification for its proposed actions. Rather, the re-promulgation of the mixture and derived-from rules would continue to declare enormous categories of waste to be hazardous by decree, based solely on the wastes' prior history, without any specific consideration of concentration levels, mobility, persistence or any other objective factor required in RCRA sections 3001(a) and (b) for identifying or listing hazardous wastes or EPA's identification or listing criteria at 40 C.F.R. §§ 261.10 and 261.11. EPA's references to its experience garnered in the process of listing and delisting specific waste streams and in developing the LDR treatment program does not establish that such wastes are likely to test hazardous, which is a fundamental criterion under the Agency's own listing regulations and which has been interpreted by EPA to mean that at least 50 percent of the subject wastes exhibit some or all of the Agency's listing criteria set forth at § 261.11(a). See, e.g., 56 Fed. Reg. 48020 (Sept. 23, 1991); 45 Fed. Reg. 33114 (May 19, 1980) (a class of wastes may be listed generically so long as most of the wastes in the class are hazardous) (emphasis added). There is no indication that EPA has collected or analyzed any samples or otherwise attempted to demonstrate that 50 percent -- or any substantial percentage -- of mixtures or treatment residues meet any of the specific listing criteria set forth in § 261.11(a). EPA's declaration that [m]any hazardous wastes continue to be toxic after they have been mixed with other waste or have been treated (64 Fed. Reg. at 63389) and references to agency expertise acquired through other regulatory actions cannot, by themselves, create the factual record necessary for rendering a listing determination. While some mixtures and treatment residues may present some hazards under some

conditions, it certainly does not follow -- nor has EPA demonstrated on the record -- that most (i.e., over 50%) mixtures and residues will pose a substantial hazard (e.g., exceed health-based constituent concentration levels by 100-1000 times), even if mismanaged. Thus, Duke Power believes that EPA has not established an adequate record to re-promulgate the mixture and derived-from rules. Furthermore, mixture and derived-from wastes do not qualify as the type of class that EPA may list as hazardous under section 261. As EPA has acknowledged, to list a class or category of wastes as hazardous, the class itself must have sufficient uniformity to enable EPA to rationally apply the § 261.11(a) listing criteria to the members of that class and to determine whether they are typically or frequently hazardous. 45 Fed. Reg. 33114 ([t]he Agency. . . must demonstrate that sufficient uniformity exists or is likely to exist.). There is little question that the universe of mixtures and treatment residues potentially subject to the mixture and derived-from rules is virtually infinite and enormously diverse. Thus, Duke Power believes that there is not sufficient uniformity among the countless combinations of wastes potentially covered by the mixture and derived from rules to justify listing such wastes as a class under § 261.11. In any event, the elimination of the mixture and derived-from rules would not create a loophole in the RCRA system. EPA has, and always has had, lawful and adequate alternatives to protect human health and the environment. Mixture and derived-from wastes, like all other wastes generated, are subject to Subtitle C regulation if they exhibit a hazardous characteristic. Since 1980, EPA has also had the authority to adopt more or broader hazardous waste listings to capture distinct categories of mixture and derived-from wastes that truly warrant hazardous waste regulation (i.e., those categories that typically and frequently test hazardous). If, indeed, EPA's concern is that some generators would alter their waste to the point it no longer meets the listing description without detoxifying, immobilizing, or otherwise actually treating the waste (64 Fed. Reg. at 63389), then EPA could craft an appropriately tailored regulatory prohibition on mixing for such purposes. Thus, from the perspective of human health and the environment, there is little rationale for continuing these overly broad rules. For all of the above reasons, Duke Power opposes EPA's proposal to re-promulgate the mixture and derived-from rules.

MDF1 - API, WH2P-00031, 2, 6 Industry Assn.

EPA Has Not Substantially Revised the Mixture and Derived-From Rules EPA asserts that this proposal technically satisfies the terms of the consent decree in ETC v. Browner, Civ. No. 94-2346. Although API is not a party to that decree, API is an intervenor in that case. API expresses no final opinion as to whether the current proposal technically meets the literal terms of the consent decree as EPA now construes it (64 Fed. Reg. 63386); that is for the other parties in that case to determine. However, API does not believe that the current proposal fulfills the spirit of either the decree or of the 1993 Congressional mandate to revise the mixture and derived from rules. In light of EPA's admission in 1992 that those rules require vast quantities of low risk wastes to be stringently regulated under RCRA Subtitle C as hazardous, API believes that Congress and the public reasonably expected that EPA would substantially revise or replace those rules so that genuinely non-hazardous wastes would not be needlessly overregulated. Absent substantial revisions, only the adoption of a new program for allowing low risk mixtures and residues to exit Subtitle C on a reasonable basis could alleviate such regulation for regulation's sake. API believes that was also the general intent of the consent decree. However, the current proposal actually proposes to retain these overbroad rules with only relatively minor limitations in the short run (regarding certain decharacterized wastes and mixed radioactive wastes); while in

the long run, EPA's risk assessment model could be so seriously flawed that it will offer little realistic hope that most mixture and derived-from wastes will be able to exit Subtitle C regulation, even if they present no significant risk. Indeed, EPA's explanation for retaining the current rules reflects virtually no change in its original intention to use those rules as a simple means to extend the hazardous waste program to wastes that EPA otherwise would not have a statutory or factual basis to regulate. [...]

MDF1 - API, WH2P-00031, 3, 3 Industry Assn.
There is No Statutory or Factual Basis for the Mixture and Derived-From Rules Despite EPA's assertion, the mixture and derived-from rules -- even as proposed to be amended -- are not valid exercises of EPA's authority to list wastes as hazardous under Section 3001. EPA's summary repromulgation of the original mixture and derived from rules in 1992 far exceeded the explicit statutory bounds on the Agency's authority to identify hazardous wastes under Subtitle C of RCRA. Section 1004(5) of RCRA expressly defines hazardous waste as a solid waste presenting substantial present or potential hazards to health or the environment. By contrast, the mixture and derived-from rules deem all mixtures and treatment residues involving listed wastes to be hazardous based solely on their history without regard to whether the mixtures or residues present substantial hazards. Contrary to EPA's claim, 64 Fed. Reg. 63390, Section 3001 itself does not confer blanket authority to decide whether any and all wastes are subject to Subtitle C regulation. Indeed, EPA seems to be claiming that Section 3001 allows it to designate any waste as hazardous simply because EPA, without meeting the statutory foundation, thinks it is prudent for the waste to be regulated under Subtitle C. See 64 Fed. Reg. 63390. This reasoning is directly contrary to the carefully constructed statutory scheme for first identifying, and then regulating, hazardous wastes. RCRA Sections 3001(a) and (b) require EPA to follow a specific two-step process for identifying hazardous wastes that meet the definition of that term under Section 1004(5). First, EPA must specify criteria to determine if a waste poses a substantial hazard; then, EPA must apply those criteria by promulgating hazardous waste characteristic tests or by listing particular hazardous wastes. EPA has, in fact, adopted such criteria based on the composition, concentration, and other characteristics of wastes, 40 CFR 261.10, 261.11; and has in fact promulgated numerous characteristics and listings. The mixture and derived-from rules, however, ignore this precise statutory blueprint and declare by fiat that all mixtures of listed hazardous waste and solid waste, and all residuals from the treatment of listed hazardous wastes, are hazardous wastes, without regard to whether such mixtures or residuals pose substantial health or environmental hazards. Indeed, in the May 1992 HWIR proposal, EPA conceded that the mixture and derived-from rules have resulted in the regulation of certain low hazard wastes as hazardous, and that millions of tons of mixtures and derived-from residuals that must be managed as hazardous ... may actually pose quite low hazards. 57 Fed. Reg. 21453 (emphasis added). EPA has also admitted that the rules have resulted in unnecessarily stringent requirements for certain low risk wastes, 57 Fed. Reg. 21454, and that the purpose of the HWIR proposal was to address over-regulatory situations created by the 'mixture' and 'derived-from' rules. Id at 21452.

MDF1 - API, WH2P-00031, 4, 4 Industry Assn.
EPA also continues to assert, erroneously, that the original mixture and derived-from rules are

valid exercises of EPA's power to list classes of hazardous wastes under 40 CFR 261.11(b). However, the mixture and derived-from rules subject so many different and unrelated types of waste to EPA regulations that it is inappropriate for the Agency to assert that these wastes are a class. By definition, class indicates some commonality among the members of the class. The mixture and derived-from rules capture a broad universe of materials with no consideration by EPA as to whether those materials have any characteristics in common (other than EPA's desire to regulate them). Moreover, EPA has again failed to substantiate that mixtures and derived-from residues as a class typically or frequently pose substantial hazards. 40 CFR 261.11(b). EPA relies primarily on the same irrelevant or speculative concerns that it has used since the rules were first promulgated. 64 Fed. Reg. 63389. These concerns are not well supported by the facts. Most of the situations which EPA describes are either hypothetical or may not involve wastes identified as hazardous under the mixture and derived-from rules. Indeed, despite many years of attempting to justify these rules, EPA still cannot find persuasive real-world incidents that do so. For example, EPA suggests that the record of delisting decisions supports retention of the rules because some denials of delisting petitions involved mixture and derived-from wastes. However, EPA acknowledges that only about 13 of 809 (1.6%) delisting petitions were actually denied because of concern about the risks posed by mixture and derived-from wastes. 64 Fed. Reg. 63389. Moreover, EPA does not explain that the process for delisting is often more demanding than the original listing of the waste. See 40 CFR 260.22. Nor does EPA identify how many of the delisting petitions that were granted involved mixture and derived-from wastes. Thus, the record does not support EPA's determination that the rule is a valid exercise of EPA's power to regulate a class of materials as hazardous waste. EPA also implicitly justifies the proposed retention of these rules by suggesting that members of the mixture and derived-from class that pose low risks could be eligible for exemption under the HWIR concentration-based option. API disagrees with EPA's suggestion. That option is still prospective and speculative and, as currently envisioned, would provide little opportunity for most industrial waste streams to exit Subtitle C (due to the conservative assumptions underlying the proposal and the multipathway analysis, as will be described in API's May 2000 comments). For all of these reasons, API opposes EPA's proposal to retain the mixture and derived-from rules largely as is, and urges EPA to reconsider that proposal. EPA claims that nine out of an unspecified number of Superfund sites involve mismanagement of mixture and derived-from wastes, but does not explain whether those sites were actually designated as Superfund sites because of such wastes, or whether the wastes themselves posed any substantial hazards. Similarly, the vague and confusing claim that such wastes were associated with RCRA corrective actions... -- itself based on old data-- says nothing about how they were associated or whether these wastes actually posed substantial hazards. 64 Fed. Reg. 63389.

MDF1 - CMA, WH2P-00033, 10, 6 Industry Assn.
EPA Has Only Minimally Met the Conditions of the Consent Decree. In this rulemaking, EPA proposes to revise the mixture and derived-from rules in two important, yet relatively minor ways. The first is to revise that section of the mixture rule dealing with waste mixtures of hazardous wastes that were listed solely because they exhibited a hazardous characteristic. EPA proposes to revise this provision so that it excludes residues from the treatment of such wastes. EPA estimates that this would exclude 0.057 million tons of treatment residuals from disposal as a hazardous waste resulting in annual savings of between 4.29 to 6.56 million dollars. The second proposal

would conditionally exempt hazardous waste mixed with low-level radioactive waste contingent on it being managed in certain ways. EPA estimates that this would save industry less than $1 million/year.1 While these two exemptions are important, they fall far short of EPA's goal to relieve the over breadth of the mixture and derived-from rules as can be easily seen by comparing the proposed volumes affected and estimated dollars saved between the Agency's three HWIR proposals. So, while promulgating these two exclusions may fulfill EPA's obligations under the consent decree, they do not satisfy the spirit of the Congressional mandate or EPA's stated goal to revise the mixture and derived-from rules in a meaningful way. EPA must do more. [...]

MDF1 - CMA, WH2P-00033, 10, 6 Industry Assn.
[...] 1. EPA Has Failed to Justify Its Proposed Reinstatement of the Mixture and Derived-From Rules. More than seven years ago, Congress specifically directed EPA to promulgate revisions to the mixture and derived-from rules.2 The current proposal, however, breaks faith with the congressional directive and the spirit of the entire HWIR endeavor. EPA's proposal clearly falls far short of what Congress intended and what EPA itself agreed was long overdue -- substantial revisions to the mixture and derived-from rules. Until EPA makes substantial revisions to cure the over breadth of these rules, they will remain invalid because they regulate wastes under Subtitle C that are not hazardous. EPA has developed no stronger legal support or factual record to defend those rules than previously enunciated. Thus, reinstatement at this time is wholly inappropriate. The Mixture and Derived-From Rules Remain Invalid. As the Agency has acknowledged, the mixture and derived-from rules continue to regulate as hazardous waste millions of tons of wastes that may actually pose low hazards.3 Yet the current proposal merely reiterates old rationales for retaining the mixture and derived-from rules. Each of these rationales fails, because none of them gives EPA legal authority to define non-hazardous wastes as hazardous wastes. Specifically, EPA provides three reasons for retaining the mixture and derived-from rules4: (1) without these rules, listed hazardous wastes might escape Subtitle C regulation by being mixed with other wastes or minimally processed, so that they no longer met the listing description; (2) waste mixtures and residuals can be hazardous, as demonstrated through the Agency's listing, delisting, and LDR programs and Section 3001(a) of RCRA provides authority for EPA to consider the need for regulating wastes; and (3) Sections 3002 through 3004 of RCRA provide authority for EPA to fashion criteria for hazardous wastes to exit Subtitle C and to impose requirements on wastes until they cease to be hazardous. As discussed below, none of these three arguments can support the continued regulation through the mixture and derived-from rules of waste mixtures or residues that are not hazardous.

MDF1 - CMA, WH2P-00033, 14, 3 Industry Assn.
Sections 3002-3004 Do Not Address When Hazardous Wastes Exit Subtitle C, and They Give EPA No Authority Over Non-Hazardous Wastes. Whether mixtures of listed wastes and solid wastes, or residuals from processing of listed wastes, are hazardous is a question of waste identification governed by RCRA section 3001. Sections 3002 through 3004 of RCRA provide no authority whatsoever for identifying wastes as hazardous if they do not meet the criteria articulated in section 3001. Those sections are irrelevant to EPA's decision to retain the mixture and derived-from rules, and EPA should not attempt to rely on them. It should be obvious that Subtitle C, including sections 3002 to 3004, is limited to regulation of hazardous waste, as defined under

section 3001. Thus, EPA lacks authority to impose conditions on wastes that are not hazardous. This point is not contradicted by the decision in Chemical Waste Management v. EPA.2 In that case, the Court of Appeals held that section 3004 land disposal restriction (LDR) treatment requirements to minimize threats were not satisfied by treatment to characteristic levels of hazard. Nevertheless, EPA has treated and continues to treat delisted wastes – including mixtures and treatment residues -- as wholly outside of Subtitle C and not subject to continuing LDR treatment restrictions. Nothing in that case or any other requires or permits EPA to continue to regulate under Subtitle C wastes that are not hazardous and have never been determined to be hazardous under section 3001. In sum, unless and until EPA promulgates exemptions from the mixture and derived-from rules that correspond to EPA's actual statutory authority to define hazardous waste, EPA will continue to regulate beyond its jurisdiction. In addition to the previous discussion, CMA incorporates by reference herein additional arguments made in its briefs in Mobil Oil Corp. v. EPA, D.C. Cir. No. 92-1211, that further demonstrate the lack of authority to reinstate the mixture and derived-from rules.

MDF1 - CMA, WH2P-00033, 12, 2 Industry Assn.
EPA's Desire To Regulate Minimally Mixed or Processed Listed Wastes Cannot Justify Regulating Non-Hazardous Mixtures And Residues. EPA's first reason for reinstating the mixture and derived-from rules, i.e., to keep wastes escaping regulation, is, like the rules themselves, fatally over-broad. EPA simply lacks authority under RCRA section 3001 to define as hazardous wastes, even minimally mixed or processed listed wastes, that are not in fact hazardous. Instead, Congress in section 3001 expressly required EPA to identify or list only wastes that are hazardous. In addition, EPA cannot remedy its over-broad regulation of all mixtures and residues by relying on its delisting program or the rationale that these rules allow them to set conditions on how hazardous wastes exit Subtitle C. Since EPA lacks Subtitle C authority over non-hazardous mixtures and residues, it cannot impose conditions as requirements for not regulating them as hazardous. Similarly, if EPA lacks jurisdiction over non-hazardous mixtures and residues, EPA cannot require generators of such materials to submit petitions for delisting as conditions for avoiding regulation (and as a practical matter submit to years of Subtitle C regulation before the petitions are granted). As EPA has itself acknowledged, the delisting process is resource intensive and time consuming and imposes costs on industry and government. Such a process cannot adequately substitute for a proper regulatory definition of hazard that limits EPA's assertion of regulatory authority to its statutory jurisdiction. This is particularly true given that states, rather than EPA, typically are authorized to make delisting determinations and may impose their own criteria that do not track the limits of EPA's statutory authority. EPA also cannot legally justify over-broad regulations based on the provision of a variance procedure, much less on a delisting program that simply provides for future, limited amendments to over-broad rules. EPA's suggestions that it should retain the mixture and derived-from rules to address when and how listed wastes may exit from Subtitle C regulation is simply another form of the discredited continuing jurisdiction rationale. By articulating this rationale, moreover, the Agency demonstrates the weaknesses of its own argument by implicitly recognizing that many mixtures and residues do not meet the listing descriptions and thus, absent these rules, would not be regulated under Subtitle C. Finally, EPA need not, should not, and cannot regulate under Subtitle C those mixtures and residues that are not hazardous. Although RCRA may be understood to contemplate cradle to grave regulation, hazardous waste is effectively laid to rest when it ceases to be hazardous, i.e.,

no longer meets the statutory definition of hazardous waste. Similarly, hazardous waste is effectively interred by concentration-based or contingent management-based exemptions that assure that wastes are not hazardous. Thus, it is wholly unnecessary to regulate through to final disposal under Subtitle C wastes that have become non-hazardous after mixing or processing.

MDF1 - CMA, WH2P-00033, 4, 2 Industry Assn.
[...] Consequently, CMA and its members have invested large amounts of resources urging EPA to revise these rules so that waste are no longer regulated under Subtitle C when they cease to meet the statutory threshold for hazardous waste. For example, in 1989 CMA petitioned EPA to establish de minimis endpoints for mixtures and derived-from wastes. We also served as a member of EPA's Federal Advisory Committee that discussed these issues. CMA also supported legislation that directed EPA to revise the mixture and derived-from rules by October 1, 1994- and sued EPA when it failed to meet the deadline. When the D.C. Court vacated the mixture and derived-from rules due to lack of public notice and opportunity for comment, it established that these rules had been unlawful from their inception, i.e., 1980. After the Agency reinstated these rules, it successfully sidestepped a legal challenge based on the theory that the rules could not be challenged until after EPA revised the rule. This means that CMA members - and other generators of hazardous waste - have been required to comply for over 20 years with a rule that the court declared unlawful from its promulgation![...]

MDF1 - CMA, WH2P-00033, 13, 3 Industry Assn.
EPA Cannot Define All Mixtures and Residues As Hazardous Waste Based on its Concerns Over Particular Mixtures And Residues. In section 3001(a) of RCRA, Congress authorized EPA to identify characteristics or to list hazardous wastes only after taking into account toxicity, persistence, and degradability . . . potential for accumulation . . . and other related factors. Congress specifically intended for the determination of whether a waste is hazardous to be an objective one, based on factors such as the quantity, concentration, physical, chemical or infectious characteristics including toxicity, persistence and degradability in nature, potential for accumulation in human tissue, and other factors .... Under section 3001(b)(1), these factors must be carefully evaluated in order to determine whether particular wastes meet the statutory definition of hazardous waste in section 1004(5), i.e., pose a substantial present or potential hazard . . . when improperly . . . managed. Whether a non-hazardous waste results from mixing with or processing of listed hazardous wastes is simply irrelevant to the question of whether that waste is hazardous. By retaining the mixture and derived-from rules, the Agency will continue to regulate mixtures and residues without regard to any other factors that EPA must evaluate under section 3001 in determining whether a waste is hazardous. Indeed, as the Agency has acknowledged, this amounts to waste being classified as hazardous based on parentage, not on any criteria in § 3001-2. EPA has not attempted to justify the mixture and derived-from rules according to the objective factors and process identified in section 3001. Nor could EPA do since mixtures and residues from listed wastes are not hazardous according to these criteria. Further, the mixture and derived-from rules cannot be justified as class listings, based on the typical or frequent hazard posed by listed wastes and mixtures or residues that EPA has actually studied. To adopt such a class listing, EPA would have to evaluate the wide range of mixtures and residues to which the mixture and derived-from rules apply to determine that class listing is appropriate. Even now,

twenty years after EPA first adopted those rules, the Agency has not performed such evaluations. And, as noted previously, EPA would have to ignore the evidence before it that many mixtures with and residues from listed wastes are not hazardous. EPA therefore cannot and should not continue to define as hazardous waste all (non-excluded) mixtures with and residues from listed wastes, on the basis that some mixtures or residues have been found during listing, delisting, and treatment program evaluations to pose hazards. It should be obvious that any such determination of hazardousness is limited to the materials that in fact meet the criteria in RCRA § 3001(a) and RCRA's definition of hazardous waste. Nor can EPA simply presume that mixtures or residues are hazardous simply because they result from mixture with or processing of listed wastes. As the Agency should know from prior experience in its listing program, it may not continue to presume that wastes have similar properties after receiving evidence that particular wastes do not exhibit those.

MDF1 - SOCMA, WH2P-00035, 25, 1 Industry Assn.
SOCMA Questions the Agency's Continued Failure To Assess the Economic or Regulatory Impact of Retaining the Mixture and Derived-From Rules As indicated by the initial opening paragraph of the HWIR Proposal, the primary regulatory action proposed by EPA is the retention of the mixture and derived-from rules: SUMMARY: Today's action proposes to retain and amend the mixture rule and the derived-from rules in the Resource Conservation and Recovery Act (RCRA). The mixture and derived-from rules ensure that hazardous wastes that are mixed with other wastes or that result from the treatment, storage or disposal of hazardous wastes do not escape regulation and thereby cause harm to human health and the environment. (64 Fed. Reg. 63382.) SOCMA understands that the Agency had anticipated also proposing regulatory exit levels based on the 3MRA model. However, this approach is not ready for proposal, and EPA is unable to project when or whether it might by ready in the foreseeable future: Despite a concerted, sustained effort, we did not succeed in developing within the consent decree time frame a risk assessment capable of generating reliable exemption levels. We concluded that we could not implement our preferred option by the October 31 deadline for proposed revisions. Moreover, we were not sure how much additional time we would need to address the remaining modeling issues. We concluded that we would better serve the public interest and better utilize our rulemaking resources by proceeding with the options that were ready for proposal rather than seeking another deadline extension for the purpose of resolving the complex technical issues presented by the risk assessment. (64 Fed. Reg. 63386 (emphasis added).) Thus, as EPA explicitly acknowledged, the proposal to retain the mixture and derived-from rules is not being presented on any short-term, interim basis. The mixture and derived-from rules would no longer be considered emergency measures pending expected regulatory relief. Instead, EPA effectively is proposing to retain these rules along with a set of narrow regulatory carve-outs -- on a permanent basis as key underpinnings of the RCRA regulatory program. Consequently, it is particularly puzzling that EPA has not undertaken any regulatory or economic analysis of the impacts of its proposal to retain the mixture and derived-from rules on a permanent basis. In fact, EPA's economic and regulatory analysis fails to address these impacts on any substantive level. Given that SOCMA members operate facilities that are routinely and adversely affected by the costs imposed by the mixture and derived-from rules, SOCMA believes that the Agency has an obligation to evaluate fairly and fully the costs and burdens associated with the proposed retention of these provisions. The Agency has not met that obligation. EPA's Economic Analysis Fails To Address The Costs Of Retaining the Mixture and

Derived-from Rules As a result of its failure to address the costs associated with retaining the mixture and derived-from rules, EPA's economic assessment is both incomplete and inconsistent with Executive Order 12866. As the President stated, The American people deserve a regulatory system that works for them, not against them: a regulatory system that protects and improves their health, safety, environment, and well-being and improves the performance of the economy without imposing unacceptable and unreasonable costs on society.... The primary regulatory impact of the proposed rule is retaining the mixture and derived-from rules. Yet, on its face, EPA's economic assessment assumes that there are no costs associated with this regulatory scheme. This assumption is clearly erroneous. The heading chosen by EPA for the Federal Register discussion of economic impacts What Are the Economic Impacts of Today's Proposed Regulatory Changes? -- succinctly identifies the problem with EPA's economic analysis. EPA did not consider and did not analyze the economic impact of continuing to retain the mixture and derived-from rules. Since these rules are presently in place, EPA apparently decided to ignore the costs imposed by these rules. Unfortunately, the industrial facilities that are subject to these rules do not have that option. They have been coping and apparently will be required to continue to cope with the economic impacts of these rules for the foreseeable future. EPA's economic analysis for the HWIR Proposal thus fails to address the primary regulatory impact of the HWIR Proposal the continued cost of compliance with the mixture and derived-from rules. Instead, as discussed previously in Section II, EPA simply addresses the economic impact of the proposed modification for ICR listed wastes. This approach conveniently allows EPA to characterize the economic impact of the HWIR Proposal as generating a potential economic savings estimated at $5.048 million, without any acknowledgment or discussion of the costs associated with the proposed retention of the mixture and derived-from rules. 64 Fed. Reg. 63447-48. EPA provides no basis for its failure to address the costs associated with retention of the mixture and derived-from rules. One possible reason is the agency's failure to identify an appropriate baseline against which to measure the rule. The Office of Management and Budget recommends that a baseline should be the best assessment of the way the world would look absent the proposed regulation.... Often it may be reasonable for the agency to forecast that the world absent the regulation would resemble the present. For the review of an existing regulation, the baseline should be no change in the existing regulation; this baseline can then be compared against reasonable alternatives. (Economic Analysis of Federal Regulations under Executive Order 12866, at p. 8(Jan.11, 1996).) Since EPA has never conducted an economic assessment of the existing mixture and derived-from rules, SOCMA believes that it is not unreasonable for EPA to use a baseline from 1980. SOCMA believes that EPA has an obligation to evaluate the costs associated with the proposed retention of these provisions since the costs associated with them have never been fully quantified. When the original derived from and mixture rules were promulgated in 1980, EPA was under no obligation to assess the economic impacts of the rules compared to the world absent the regulations. After briefly being vacated in December 1991, the 1992 reinstatement of the rules also did not receive an economic assessment due to EPA's use of the good cause expedited administrative procedures. Furthermore, in connection with the previous HWIR proposal in 1995, EPA only estimated the impacts of using the multi-pathway model in comparison to a baseline of the existing interim mixture and derived-from rules. Consequently, EPA has never conducted a thorough and comprehensive cost impact assessment of the mixture and derived-from rules. SOCMA seriously questions the Agency's continued failure to conduct such an assessment. Certainly, basing the existing proposal on an impact analysis that only addresses a minor carve out from the status quo

merely perpetuates the prior failure to review these rules. The regulated community should, at this juncture, be entitled to a more comprehensive assessment. Continued failure to evaluate these types of rulemaking impacts was certainly one of the problems that President Clinton aimed to reform with Executive Order 12866. Of equal concern is the failure of EPA's economic impact analysis to address reasonable alternatives to the existing regulations. Instead, the economic assessment only refers to the potential future use of risk-based constituent exemption levels. However, this alternative is not compared to the current regulatory framework as OMB suggests. Consequently, this economic impact report does not contain estimates of the potential HWIR-eligible waste quantities... Economic Assessment of the US EPA's 1999 Proposed Hazardous Waste Identification Rule (HWIR), October 29, 1999, p. ii. Given that the 3MRA model is not yet functional, it is understandable that EPA was not able to assess the quantities of HWIR eligible wastes. However, that very fact should have led EPA to assess other alternatives. As indicated by these comments and EPA's own regulatory activities, other alternatives to simple reinstatement of the mixture and derived-from rules do exist. For example, in the HWIR Proposal preamble, EPA indicates that it has been working on an alternative approach that would exempt combustion residues from the scope of the mixture and derived-from rules and regulate them as a separate waste category.3 See 64 Fed. Reg. at 63387. It would have been reasonable for the Agency to consider and assess a number of these alternatives before merely proposing to retain the mixture and derived-from rules, with only a minor modification. SOCMA believes that the Agency's failure to assess any cost other than the limited ICR waste exemption is inconsistent with the purposes of Executive Order 12866 and the guidance recommendations developed by OMB. EPA offers no rationale for its failure to provide an analysis of the economic impact of proposing to retain the mixture and derived-from rules. Given the detailed information compiled by the Agency in the context of various listing regulations, it is reasonable to expect that the Agency already has a considerable amount of the information it would need for this purpose. Furthermore, given the recent rulemaking activity for hazardous waste listings, it is also reasonable to expect that the Agency has at hand relatively current cost information for the various types of hazardous waste management activities that are triggered by application of the mixture and derived-from rules. The projected longevity of these rules is underscored by the fact that EPA has taken the position that further development of the 3MRA model and any associated regulatory exit levels will be undertaken on a separate track and that this activity is no longer subject to the deadlines established by the consent decree in Environmental Technology Council v. Browner. Thus, EPA has disassociated its development and use of the 3MRA model from its obligation under the consent decree to propose revisions to the mixture and derived-from rules. See 64 Fed. Reg. at 63386. 2. See 5 U.S.C. § 503. 3.For example, in this context, EPA notes that this approach had been listed in the April 1999 Regulatory Agenda and was expected to allow the Agency to regulate the wastes as hazardous but application of these requirements could be tailored to fit the physical and chemical properties of these wastes. 64-Fed. Reg. at 63387. 4.Petroleum refining Process Waste Listing, 63 FR 4210, 8/6/98, LDR Phase IV Rule, 63 FR 28556, 5/26/98, Dyes and Pigments Listing Proposal, 64 FR 40192, 7/23/99, Chlorinated Aliphatics Listing Proposal, 64 FR 46475, 8/25/99.

MDF1 - SOCMA, WH2P-00035, 28, 2 Industry Assn.
EPA's Failure To Assess The Costs Associated with the Proposed Retention of the Mixture and Derived-From Rules Is Inconsistent with the Regulatory Flexibility Act and SBREFA The

Regulatory Flexibility Act, as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), requires an Agency to make an assessment of whether a proposed or final rule will have a significant economic impact on a substantial number of small entities. If so, then the Agency must prepare and make available for public comment a regulatory flexibility analysis that describes the effect of the rule on small entities. If the Agency certifies that the rule will not have this type of significant economic impact, then no such analysis is required. With respect to the HWIR Proposal, EPA determined that the statutory requirement for a regulatory flexibility analysis was not triggered and certified that the HWIR Proposal would not have a significant economic impact on a substantial number of small entities. 64 Fed. Reg. 63454. Unfortunately, this conclusion was based only the Agency's assessment of the economic impact of the ICR listed waste proposal: As discussed in Section XXI [of the Federal Register preamble], we have prepared an economic analysis of the potential effects of this rule, and have determined that the rule is expected to have a net beneficial effect on eligible entities, in the form of reduced environmental regulatory compliance costs for industrial waste management. The economic analysis evaluates the extent to which both small quantity and large quantity industrial waste generators might be potentially eligible for cost savings under this rule. This proposed rule is voluntary, and the overall economic effect of this regulation for both small and large entities which are eligible to participate, is expected to be a net average annual reduction in industry regulatory burden and compliance costs. Consequently, because the net economic impacts and effects of this rule are beneficial rather than adverse, this rule will not have a significant [adverse] economic impact on a substantial number of small entities. (64 Fed. Reg. 63454.) The fundamental flaw in EPA's economic impact analysis -- failure to consider costs attributable to the proposed retention of the mixture and derived-from rules is thus replicated in the regulatory flexibility analysis for the HWIR Proposal. SOCMA believes that EPA's failure to conduct a complete Regulatory Flexibility Assessment subverts the required administrative procedures of the Regulatory Flexibility Act. A formalistic interpretation of the statute indicates that the agency has not fully complied. EPA's proposed retention of the mixture and derived from interim rules constitute a rule in and of itself. The term rule means any rule for which the agency publishes general notice of proposed rulemaking pursuant to section 553(b) of this title... for which the agency provides for notice and public comment. See 5 U.S.C. §601(2). As such, the November 19, 1999 Notice of Proposed Rulemaking meets the statutory definition or a rule as defined in the Regulatory Flexibility Act. Since EPA is proposing this rule pursuant to section 553 of the Administrative Procedure Act, the agency is required to consider the impacts of the rule on small businesses. Whenever an agency is required by section 553 of this title, or any other law, to publish general notice of proposed rulemaking for any proposed rule... the agency shall prepare and make available for public comment an initial regulatory flexibility analysis. See 5 U.S.C. § 603(a). EPA's continued failure to examine small business impacts is in violation of the Regulatory Flexibility Act. Retrospective evaluation of the impacts of existing regulations on the small entities was one of the fundamental intents of Congress when enacting the Regulatory Flexibility Act. Under Section 610, agencies are required to develop a plan to periodically review rules issued by the agency which or will have a significant economic impact on a substantial number of small entities. The plan shall provide for the review of all such agency rules existing on the effective date of this chapter within ten years of that date and for the review of such rules adopted after the effective date of this chapter within ten years of the publication of such rules as the final rule. 5 USC §610(a) In reviewing the rules, EPA is to consider the nature of the complaints received

about the rule and the length of time since the rule has been evaluated or the degree to which technology, economic conditions, or other factors have changed in the area affected by the rule. Emphasis added Id at §§610(b)(2), (5). There is no language in the RFA that allows agencies to sever a proposed rule into individual segments for independent regulatory flexibility analyses. Further, there is no severability language providing for regulatory flexibility analyses to be conducted only on certain aspects of a proposed rule. SOCMA believes that if Congress had intended such severability, it would have addressed it expressly in the statute. As such, SOCMA believes that EPA has erroneously interpreted the Regulatory Flexibility Act by reading into the statute a severability clause. Neither is there express language directing agencies to focus regulatory flexibility analyses exclusively on new impacts. SOCMA believes that part of the congressional intent of the Regulatory Flexibility Act is to assess the economic impacts of a proposed rule in its entirety not a portion thereof and not limited to new impacts. SOCMA believes that an analysis of the burdens of the existing derived from and mixture rules and their impacts on small entities is warranted and that by neglecting to do conduct such an analysis, EPA has not fully complied with Reg Flex. In lieu of conducting initial and final regulatory impact analyses, agencies have the option of certifying that a rule will not have a significant impact on a substantial number of small business entities. Id at §605(b). The Small Business Regulatory Enforcement Fairness Act (SBREFA) amended the RFA to require federal agencies to provide a statement of the factual basis for certifying that a rule will not have a such an impact. 64 Fed. Reg. 63454 (November 19, 1999). EPA's factual basis for its certification is based on the agency's economic assessment. As these comments have discussed, EPA's economic impact assessment fails to address the impacts of the most onerous part of the current proposal the retention of the mixture and derived-from rules. In fact, because of the rule's unique history, EPA has never considered the disparate impacts of these rules on the small business community. See 5 U.S.C. §608(a). By relying on inadequate data to certify that the rule has no significant small business impact, EPA's basis for certification does not withstand scrutiny. By neatly concluding that the ICR listed waste modification will have a beneficial effect and arbitrarily limiting its analysis to that one aspect of the HWIR Proposal, EPA has subverted its obligation to conduct a full economic and regulatory impact analysis of each element of the HWIR Proposal. This approach fails to fulfill the Agency's substantive obligations and also avoids a much-needed evaluation of the actual costs and benefits of the mixture and derived-from rules as they are applied and implemented by the Agency today. SOCMA believes that the agency has a great opportunity to ascertain the real world impacts of these rules should it consider amendments to the existing regulatory scheme.

MDF1 - SOCMA, WH2P-00035, 1, 3 Industry Assn.
[...]SOCMA questions the Agency's continued failure to assess the economic or regulatory impact of retaining the mixture and derived-from rules EPA's economic analysis fails to address the costs of retaining the mixture and derived-from rules EPA's failure to assess the costs associated with the proposed retention of the mixture and derived-from titles is inconsistent with the Regulatory Flexibility Act and SBREFA

MDF1 - SOCMA, WH2P-00035, 6, 3 Industry Assn.
SOCMA questions the fact that the HWIR Proposal fails to acknowledge, let alone assess, the

significant costs and burdens of EPA's proposal to retain the mixture and derived-from rules. To conclude that there are no costs associated with maintaining these regulations is disingenuous. Further, the fact that these regulations and the attendant costs have been in place for twenty years does not excuse the Agency's failure to acknowledge and assess the economic costs and regulatory burdens imposed by these rules. Given industry's repeated requests for substantive relief, EPA should by now taken the necessary steps to assess and understand the economic and regulatory impact of these rules on industry. Such an inquiry would have enabled EPA to identify waste streams and activities that are unnecessarily subjected to regulation under Subtitle C as a result of the mixture and derived-from rules. Moreover, had EPA undertaken more focused analysis of the categories and types of waste affected by the mixture and derived-from rules, it would have been better positioned to develop alternative approaches for exempting low-risk wastes from Subtitle C regulation.

MDF1 & MDF2 - BP Amoco Chemicals, WH2P-00041, 1, 3 Industry
EPA's proposal to reinstate the mixture/derived-from rules falls far short of the Agency's obligation to make meaningful revisions to these regulations. The two narrow exemptions to the mixture/derived-from rules offered in the proposal do not meet EPA's Congressional mandate or the Agency's own goal to revise these rules in a meaningful way. The mixture/derived-from rules cause large volumes of NonHazardous wastes to be regulated under Subtitle C of RCRA with no proportionate benefit to human health or the environment. These regulations should not be reinstated until EPA makes significant revisions that limit the excessively broad scope of the mixture/derived-from rules.

MDF1 - Occidental Chemical Corp., WH2P-00046, 3, 1 Industry
EPA Has Failed to Justify Its Proposed Reinstatement of the Mixture and Derived-From Rules Reinstatement is Premature Until EPA Fulfills its Obligation to Promulgate Meaningful Revisions To the Mixture and Derived-From Rules More than seven years ago, Congress specifically directed EPA "to promulgate revisions" to the mixture and derived-from rules. Pub. L. No. 102-389, 106 Stat. 1571, 1602-03 (1992). The current proposal, however, breaks faith with the Congressional command and the spirit of the entire HWIR endeavor. It proposes only two narrow "revisions to the mixture and derived-from rules," i.e., an exemption for wastes listed solely on the basis of their characteristics and an exemption for radioactive mixed waste. 64 Fed. Reg. at 63,382. Although OxyChem and OVLP support these limited exemptions, they plainly fall far short of what Congress intended -- and what EPA itself agreed was long overdue -- by way of revisions to the mixture and derived-from rules. Until EPA makes substantial revisions to cure the overbreadth of the mixture rule, they will remain invalid because they regulate wastes under Subtitle C that are not hazardous. EPA has not developed stronger legal support or factual record to defend those rules than previously enunciated. Thus, reinstatement at this time is wholly inappropriate. The Mixture and Derived-From Rules Remain Invalid As the Agency has previously acknowledged, the mixture and derived-from rules continue to regulate as hazardous waste millions of tons of wastes that may actually pose low hazards. 57 Fed. Reg. 21,450, 21,451 (1992). Yet the current proposal merely restates shop-worn rationales for retaining the mixture and derived-from rules. Each of these rationales fails, because none of them gives EPA legal authority to define non-hazardous wastes as hazardous wastes. Nor are they even valid policy reasons for

continuing the regulation of non-hazardous wastes more than a decade after this flaw in Subtitle C was brought to EPA's attention. Specifically, EPA provides three reasons for retaining the mixture and derived-from rules. These are: (1) without these rules, listed hazardous wastes might escape Subtitle C regulation by being mixed with other wastes or minimally processed, so that they no longer met the listing description; (2) waste mixtures and residuals "can be hazardous," as demonstrated through the Agency's listing, delisting, and LDR programs and Section 3001(a) of RCRA provides authority for EPA to consider the need for regulating wastes; and (3) Sections 3002 through 3004 of RCRA provide authority for EPA to fashion criteria for hazardous wastes to exit Subtitle C and to impose requirements on wastes until they cease to be hazardous. 64 Fed. Reg. at 63,389, 63,390. As discussed below, none of these three arguments can support the continued regulation through the mixture and derived-from rules of waste mixtures or residues that are not hazardous.

MDF1 - Occidental Chemical Corp., WH2P-00046, 5, 5 Industry

RCRA Sections 3002-3004 Do Not Address When Hazardous Wastes "Exit" Subtitle C and They Give EPA No Authority Over Non-Hazardous Wastes. Whether mixtures of listed wastes and solid wastes, or residuals from processing of listed wastes, are hazardous is a question of waste identification governed by RCRA section 3001. Sections 3002 through 3004 of RCRA provide no authority whatsoever for identifying wastes as hazardous if they do not meet the criteria articulated in section 3001. Those sections are irrelevant to EPA's decision to retain the mixture and derived-from rules, and EPA should not attempt to rely on them. Subtitle C, including sections 3002 to 3004, is limited to regulation of hazardous waste, as defined under section 3001. Thus, EPA also lacks authority to impose conditions on wastes that are not hazardous. This point is not contradicted by the decision in Chemical Waste Management v. EPA, 976 F.2d 2 (D.C. Cir. 1992), cert. denied, 507 U.S. 1057 (1993). In that case, the Court of Appeals held that section 3004 land disposal restriction (LDR) treatment requirements to minimize threats were not satisfied by treatment to characteristic levels of hazard. Nevertheless, EPA has treated and continues to treat delisted wastes - including mixtures and treatment residues -- as wholly outside of Subtitle C and not subject to continuing LDR treatment restrictions. Nothing in that case or any other requires or permits EPA to continue to regulate under Subtitle C wastes that are not hazardous and have never been determined to be hazardous under section 3001. This fact will not change if EPA replaces its overbroad mixture and derived-from rules instead of requiring a delisting before EPA recognizes that particular wastes are not in fact hazardous. In sum, unless and until EPA promulgates exemptions from the mixture and derived-from rules that precisely correspond to EPA's actual statutory authority to define hazardous waste, EPA will continue to regulate beyond its jurisdiction. It is obvious that the Agency is at best a long way from issuing any such rules. The Agency should simply abandon the mixture and derived-from rules.

MDF1 - Occidental Chemical Corp., WH2P-00046, 4, 1 Industry

EPA's Desire To Regulate Minimally Mixed or Processed Listed Wastes Cannot Justify Regulating Non-Hazardous Mixtures And Residues EPA's first reason for reinstating the mixture and derived-from rules is, like the rules themselves, fatally over-broad. EPA simply lacks authority under RCRA section 3001 to define as hazardous waste even minimally mixed or processed listed wastes that are not in fact hazardous. Instead, Congress in section 3001 expressly required EPA to

identify or list only wastes that are hazardous. EPA cannot remedy its over-broad regulation of all mixtures and residues by relying on conditional exemptions or on its delisting program to remove non-hazardous wastes from Subtitle C regulation. EPA lacks Subtitle C authority over non-hazardous mixtures and residues, and thus cannot impose conditions as requirements for not regulating them as hazardous. Similarly, if EPA lacks jurisdiction over non-hazardous mixtures and residues, EPA cannot require generators of such materials to submit petitions for delisting as conditions for avoiding regulation (and as a practical matter submit to years of Subtitle C regulation before the petitions are granted). As EPA has itself acknowledged, the delisting process is "resource intensive and time consuming" and imposes costs on industry and government. Such a process cannot adequately substitute for a proper regulatory definition of hazard that limits EPA's assertion of regulatory authority to its statutory jurisdiction. This is particularly true given that states, rather than EPA, typically are authorized to make delisting determinations and may impose their own criteria that do not track the limits of EPA's statutory authority. EPA also cannot legally justify over-broad regulations based on the provision of a variance procedure, much less on a delisting program that simply provides for future, limited amendments to over-broad rules. EPA's suggestions that it should retain the mixture and derived-from rules to address when and how listed wastes may "exit" from Subtitle C regulation is simply another form of the discredited "continuing jurisdiction" rationale. By articulating a need for the mixture and derived-from rules, moreover, the Agency contradicts its own argument by implicitly recognizing that many mixtures and residues do not meet the listing descriptions and thus, absent these rules, would not be regulated under Subtitle C. This shows that the mixture and derived-from rules define when waste mixtures and treatment residues "enter" Subtitle C, not when listed wastes "exit" it. Finally, EPA need not, should not, and cannot regulate under Subtitle C those mixtures and residues that are not hazardous. Although RCRA may be understood to contemplate "cradle to grave" regulation, hazardous waste is effectively interred when it ceases to be hazardous, i.e., no longer meets the statutory definition of hazardous waste. Similarly, hazardous waste is effectively interred by concentration-based or contingent management-based exemptions that assure that wastes are not hazardous. Thus, it is wholly unnecessary to regulate through to final disposal wastes that have become non-hazardous after mixing or processing. EPA Cannot Define All Mixtures and Residues As Hazardous Waste Based on its Concerns Over Particular Mixtures And Residues. In section 3001(a) of RCRA, Congress authorized EPA to identify characteristics or to list hazardous wastes only after "taking into account toxicity, persistence, and degradability . . . potential for accumulation .. . and other related factors." Congress specifically intended for the determination of whether a waste is hazardous to be an objective one, based on factors such as the "quantity, concentration, physical, chemical or infectious characteristics including toxicity, persistence and degradability in nature, potential for accumulation in human tissue, and other factors . ..." H.R. Rep. No. 1491, 94th Cong., 2d Sess. 25-26, reprinted in 1976 U.S. Code Cong. & Ad. News 6328, 6263-64. Under section 3001(b)(1), these factors must be carefully evaluated in order to determine whether particular wastes meet the statutory definition of hazardous waste in section 1004(5) of RCRA, i.e., pose "a substantial present or potential hazard . . . when improperly . . . managed." Whether a waste results from mixing with or processing of listed hazardous wastes is simply irrelevant to the question of whether that waste is hazardous. By retaining the mixture and derived-from rules, the Agency will continue to regulate mixtures and residues without regard to any other factors that EPA must evaluate under section 3001 in determining whether a waste is hazardous. Indeed, as the Agency has acknowledged, this amounts to waste being classified as

hazardous based on parentage, not on any criteria in 3001. EPA has not attempted to justify the mixture and derived-from rules according to the objective factors and process identified in section 3001. Nor could EPA do so, as EPA itself acknowledges that many - perhaps most - mixtures with and residues from listed wastes are not hazardous according to these criteria. Further, the mixture and derived-from rules cannot be justified as "class" listings, based on the "typical or frequent" hazard posed by listed wastes and mixtures or residues that EPA has actually studied. 40 C.F.R. 261.11(b). To adopt such a class listing, EPA would have to evaluate the wide range of mixtures and residues to which the mixture and derived-from rules apply to determine that class listing is appropriate. Even now, twenty years after EPA first adopted those rules, EPA has not performed such evaluations. And, as noted previously, EPA would have to ignore the evidence before it that many mixtures with and residues from listed wastes are not hazardous. EPA thus cannot and should not continue to define as hazardous waste all (non-excluded) mixtures with and residues from listed wastes, on the basis that some mixtures or residues have been found during listing, delisting, and treatment program evaluations to pose hazards. It should be obvious that any such determination of hazardness is limited to the materials that in fact meet the criteria in RCRA § 3001(a) and RCRA's definition of hazardous waste. Nor can EPA simply "presume" that mixtures or residues are hazardous simply because they result from mixture with or processing of listed wastes. As the Agency should know from prior experience in its listing program, it may not continue to presume that wastes have similar properties after receiving evidence that particular wastes do not exhibit those properties.

MDF2 - Ash Grove Cement Co., WHWP-00195, 1, 2 Waste Mgmt. Co.
Initially, Ash Grove was pleased to learn that EPA was planning to revamp the overly conservative nature of the proportion of Subtitle C of RCRA containing the "mixture" and "derived from" rules. Based on its understanding of the proposed HWIR rule, Ash Grove is most disappointed that EPA appears to be missing an opportunity to provide true common-sense regulatory reform. The proposed HWIR rule seems to be more of the same irrational regulatory regime, only worse. When compared to established standards, a waste material is either hazardous or it is not. It is not necessary to consider the origin of the material or any of a host of other convoluted factors that seem to appeal to EPA.

MDF2 - ASTSWMO, WH2P-00002, 1, 3 State
The Task Force supports the retention of the mixture and derived-from rules that are the subject of the proposed rule. We agree with EPA that it is necessary for the protection of human health and the environment to capture mixtures and derivatives of listed hazardous wastes in the universe of regulated wastes. Without these rules, it would be possible to alter a particular waste to the point that it no longer meets the listing description without detoxifying, immobilizing, or otherwise actually treating the waste. In order to avoid this result, we believe these rules are necessary to ensure that hazardous wastes are regulated until they no longer pose a risk to human health and the environment. [...]

MDF2 - State of California, WH2P-00009, 1, 2 State
DTSC, like the U.S. Environmental Protection Agency (U.S. EPA), believes that retention of the mixture and derived-from rules is necessary to regulate hazardous wastes in a way that protects human health and the environment. We agree with U.S. EPA that without the mixture and derived-from rules, some generators would alter their waste to the point that it no longer meets the listing description without detoxifying, immobilizing, or otherwise actually treating the waste. Generators could escape regulatory requirements by mixing listed hazardous wastes with other hazardous wastes or nonhazardous solid wastes or materials to create a "new" waste that arguably no longer meets the listing description but continues to pose a serious hazard. These wastes must therefore continue to be regulated under the Subtitle C program.

MDF2 - American Forest & Paper Assn., WH2P-00018, 1, 4 Industry Assn.
AF&PA agrees with EPA's decision to retain the mixture and derived-from rule (MDF). We believe that, while it is not a perfect solution, the approach has been used for the last fifteen years in a generally effective manner. [...]

MDF2 & ICR1 - State of New York DEC, WH2P-00048, 1, 2 State
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 - State of New York DEC, WH2P-00048, 3, 1 State
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 - State of Michigan, WH2P-00043, 1, 2 State
Preamble Section III We support the retention of the mixture and derived-from rules. These rules have worked well to ensure that hazardous wastes that are mixed with other wastes, or minimally treated, do not escape regulation assuming they are reasonably likely to continue to pose threats to human health and the environment.

MDF2 - ETC, WH2P-00034, 1, 3 Waste Mgmt. Assn.
Retain the Mixture and Derived-From Rules The ETC strongly supports EPA's proposal to retain the current mixture and derived-from rules under RCRA. 64 Fed. Reg. at 63,388-90. Since 1980, these rules have been a critical element of the RCRA hazardous waste management system. Without the mixture and derived-from rules, many wastes that are clearly hazardous and that pose substantial threats to human health and the environment would escape RCRA controls only because they are mixtures or derivatives that no longer fit an original listing description. In fact, ETC member companies handle most of the hazardous waste that is treated and disposed at commercial RCRA-permitted facilities in the United States, and we estimate that nearly half of this waste is covered because of the mixture and derived-from rules (i.e., multiple waste codes are used on profile sheets and manifests). See also The National Biennial RCRA Hazardous Waste Report (Based on 1997 Data), EPA530-S-99-036 (Sept. 1999), incorporated herein and made a part of this administrative record. ETC companies see the importance of the mixture and derived-from rules from the perspective of proper treatment and disposal of hazardous wastes. Many customers send their listed hazardous wastes to ETC firms for initial treatment that reduces the toxicity and/or mobility of some, but not all, toxic constituents in the waste. A common example would be hazardous wastes sent to a RCRA-permitted incinerator for thermal destruction of organic constituents, which also results in concentrations of toxic metals in the combustion residuals

requiring further treatment. If the combustion residues were to escape RCRA control before full treatment of the metal constituents, simply because the waste no longer fits the original listing description, EPA would not be ensuring RCRA controls until the waste ceases to pose a hazard to the public as required by law. Shell Oil Co. v. EPA, 959 F.2d 741, 754 (D.C. Cir. 1991). While EPA may believe that generators could potentially evade regulation by minimally processing or managing a hazardous waste and claiming that the resulting residue is no longer the listed waste, despite the continued hazards of the residue, 64 Fed. Reg. at 63,389 col. 2, the ETC feels that the mixture and derived-from rules are also important in the majority of situations when responsible generators seek proper treatment and disposal of their hazardous wastes. The ETC agrees that the agency's experience with delisting petitions further supports the rationale for the mixture and derived-from rules. EPA has denied a significant number of delisting petitions for mixed and derivative wastes because the wastes continued to pose a significant risk. See Disposition of Delisting Petitions for Derived-From Mixture Wastes, U.S. EPA Memorandum (1992) and Analysis of Delisting Petition Data Management System, U.S. EPA (Sept. 1998) in the administrative record. In addition, the ETC acknowledges that numerous damage cases are associated with mixed and derived-from wastes. EPA has identified a number of Superfund sites and RCRA corrective action sites that contain such wastes. See Releases of Hazardous Constituents Associated with Mixture and Derived-From Wastes (1999) and Data on Mixture and Derived-From Wastes from Closures and Corrective Action at Hazardous Waste Management Facilities (1992) also in the administrative record. For the foregoing reasons, EPA should retain the long-standing and essential mixture and derived-from rules under RCRA.

MDF2 - Maine DEP, WH2P-00028, 1, 2 State

The Department strongly supports EPA's proposal and justification for retention of the mixture and derived from rules. Mixtures and residuals of hazardous waste represent a large and varied universe. The Department agrees that it is likely that without the mixture rule, some waste streams would be mixed with other non hazardous wastes that may not meet the listing, but still represent a serious human health and/or ecological risk. It is appropriate and necessary for the protection of the environment to capture mixtures and derivatives of hazardous waste in the subtitle C universe.

MDF2 - State of Missouri, WH2P-00025, 1, 3 State

First, we would like to say that we support the retention of the mixture and derived-from rules that are the subject of the proposed rule. We agree that it is necessary for protection of human health and the environment to capture mixtures and derivatives of listed hazardous wastes in the universe of regulated wastes. Without these rules, it would be possible to alter a particular waste to the point that it no longer qualifies as hazardous, even though no real treatment of the waste has occurred. In order to avoid this result, we believe these rules are necessary to ensure that hazardous wastes are regulated until they no longer pose a serious hazard to the environment.

MDF2 - Caufield Enterprises, WHWP-00035, 1, 4 Consultants

Real relief needs to be given from the mixture rule. If a solid waste isn't hazardous, it doesn't need to be treated as hazardous. It doesn't matter if some of the constituents came from a mixture or

from a process directly. A molecule of a potential hazardous material, for example, cadmium is cadmium no matter its source. This mixture situation was considered in the California hazardous waste regulations which predate RCRA and [was] discarded. To the best of our knowledge, this hasn't caused any problems. EPA's position on the mixture rule is completely unnecessary and isn't scientifically appropriate. If the compound or element in the waste needs to be controlled in a certain environment, it doesn't matter what the source is. A regulation should set the limit for that environment for that compound or element. For example, if a risk assessment shows that to protect useable groundwater, land disposal for cadmium should be limited to 5 PPM, that should be the limit for any waste sent for land disposal above useable groundwater. [....] EPA's action in promulgating the mixture and derived-from rules was unnecessary and unscientific. A molecule of lead is a molecule of lead no matter its source. California considered this situation in its original adoption of its hazardous waste regulations which predate RCRA and determined that such actions weren't necessary or appropriate. To the best of our knowledge, it hasn't caused a problem in California. If a compound in a solid waste is shown to be a risk by a realistic risk assessment for land disposal, it should be treated as a hazardous waste if the level of the compound in the risk assessment exceeds the risk level. Otherwise it should be considered non-hazardous. The same comments as in II.B.1.a. apply to mixtures of hazardous waste and environmental media. If it no longer exceeds hazardous waste levels, it should be treated as non-hazardous. EPA's proposed alternate delisting procedure is too costly, complex and unnecessary for wastes. The mixture and derived-from Rule is unnecessary and should be eliminated. See above comments. A waste tested non-hazardous should be treated as non-hazardous no matter the source.

MDF2 - Maine DEP, WHWP-00247, 2, 1 State
Maine agrees with EPA that no further revisions to the mixture or derived-from rule are warranted.

MDF2 & ICR1 - State of Michigan, 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.

MDF2 and 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 & MDF2 - Proler Int., 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.

MDF2 - DaimlerChrysler, WH2P-00042, 1, 2 Industry
Retention of the Mixture and Derived from Rules. Large quantities of waste that must be managed as hazardous due to the emergency mixture and derived from rules actually pose very low hazard. These wastes should not be subject to Subtitle C regulation. We believe absent EPA creating a significant exemption for these low hazard wastes, the mixture and derived from rules will continue to unnecessarily regulate material resulting in significant waste management costs with no associated environmental benefit. We also disagree with EPA's conclusion that waste generators would attempt to avoid proper waste management through dilution.

MDF2 - Pioneer Americas, WH2P-00036, 1, 2 Industry
EPA discusses several revisions or exemptions from a blanket mixture and derived-from rule, but proposes to retain the concept of the mixture and derived-from rules close to its original format. EPA goes on to discuss in Section 3C. why it is proposing to retain the rules. The major reason given for continuing to regulate a waste which has been derived from a listed waste is that a generator could potentially evade regulation by minimally treating a listed waste and claiming that the residue is no longer the listed waste, in spite of the residue continuing to present a substantial hazard. Pioneer believes that this argument misses the point that listed wastes which still present a substantial hazard due to the presence of (in EPA's words) high concentrations of toxic organic compounds and metals also continue to be hazardous due to the characteristic arising from those same compounds and metals; and continue to be regulated as a characteristic waste. The waste does not, as EPA claims, fall out of the regulatory system. If the waste after treatment does not present a hazard and no longer bears a hazardous characteristic, there is no reason to continue to treat the residue as a hazardous waste. Because of this, Pioneer believes that the derived-from rule is not necessary, and creates an unnecessary burden on the regulated community.

MDF2 - SOCMA, WH2P-00035, 5, 1 Industry Assn.
SOCMA and its members are extremely disappointed by the continued failure of EPA to provide substantive relief from the long-standing problems caused by the mixture and derived-from rules set out in 40 C.F.R. §§ 261.3(a)(2)(iii), (iv) & 261.3(c)(2)(I). The mixture and derived-from rules have been in place for twenty years and have also been the subject of litigation and controversy for twenty years. Over this time period, the consequences of EPA's continued reliance on these rules have become readily apparent: (1) unnecessary regulation of low-risk residues and waste as Subtitle C hazardous wastes; (2) a complex regulatory scheme that complicates compliance and sound waste management practices; and 3 (3) ongoing imposition of unnecessary costs on a broad range of industries. EPA itself has recognized these problems and the attendant need for regulatory relief; noting for example that millions of tons of mixtures and derived-from residuals that must be managed as hazardous wastes may actually pose quite low hazards. 57 Fed. Reg. 21540, 21545 (May 20, 1992). [...]

MDF2 - BAMM, WH2P-00021, 4, 3 Industry Assn.
[...] Exemptions for Low Risk Wastes Are Long Overdue. EPA's stated objective of exempting from regulation low risk wastes that present no significant risks to human health or the environment is a worthy goal that has eluded the Agency, industry, and the public for almost a decade. In the early 1990s EPA recognized the need to reduce the burdensome requirements that were being applied to wastes that presented insignificant risks, but which continued to be classified as hazardous based on their original origins. These wastes were either derived from or mixed with materials containing waste classified as hazardous; however, the levels of such hazardous constituents were so low as to have no practical significance. In 1992, EPA stated, [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 . EPA believes that low-risk wastes should not be subject to the full subtitle C control. 57 Fed. Reg. 21,540-41 (May 20, 1992). Industry has worked with the Agency throughout the 1990s on proposals to revamp the HWIR regulations. As EPA noted in its November 19, 1999 proposal, Congress recognized the problem in the FY 1993 EPA appropriations act. See 64 Fed. Reg. 63385. The appropriations measure contained a deadline of October 1, 1994 for revising the HWIR regulations. Over five years after the deadline, revisions to address the burdensome requirements have still not been promulgated. The delay in issuing these regulations imposes higher costs and diverts a greater portion of society's resources than is necessary based on the negligible risks associated with such wastes.

MDF2 - Cyprus Amax Minerals Company, WHWP-00099, 1, 3 Industry
The Proposed HWIR Represents a Continuation of EPA's Flawed Manner of Automatically Designating Listed Waste Mixtures, Derived-from Wastes, and Contained Wastes as Hazardous, Without Regard to Whether Such Designation is Justified The proposed HWIR represents the Agency's attempt to respond to the mandate of the D.C. Circuit Court of Appeals in Shell Oil v. EPA, 950 F.2d 741 (D.C. Cir. 1991), in which the 1980 mixture and derived-from rules were vacated. See 40 C.F.R. Sections 261.3(a)(2)(iv), 261.3(c)(2)(i). EPA recognizes that these rules constitute burdensome over-regulation of low-risk wastes. 60 Fed. Reg. 66346. The Agency fails to comprehend, however, that from the outset, EPA's approach to classifying waste as hazardous continues to be fundamentally flawed. Although the stated purpose of the Proposed Rule is to reduce over-regulation of low-risk wastes captured by the mixture and derived-from rules, see 60 Fed. Reg. 66346, EPA's proposal fails to address adequately the underlying and primary problem long associated with the mixture and derived-from rules, as recognized by the Shell Oil decision. The arbitrary and automatic designation of listed waste mixtures, derived-from wastes, and contained wastes as hazardous wastes, solely due to activities associated with the wastes (i.e., mixing with or treatment of a listed waste) is an unnecessarily cautious approach that could not be supported in 1980, much less now after nearly sixteen years of experience with the RCRA program. This approach was never premised on an evaluation of whether the waste itself justified classification as hazardous or whether it exhibited any hazardous waste characteristic. [...]

MDF2 - Cyprus Amax Minerals Company, WHWP-00099, 1, 3 Industry
[...] B. The Proposed Retention of the Mixture and Derived-from Rules is Unreasonable and Unnecessary The mixture and derived-from rules have no continued viability, particularly in light

of the technological advances that have developed since the rules were first promulgated in 1980. Throughout the sixteen years during which EPA has attempted to implement and develop the RCRA Subtitle C system, the regulated community has made considerable improvements in the treatment, storage, and disposal of hazardous waste. As a result, the risks that may have been formerly associated with the management of hazardous waste have been significantly reduced or eliminated, such that the universe of waste which may have warranted Subtitle C regulation in 1980 has been significantly reduced. Additionally, the arbitrary, automatic classification of wastes as hazardous, based on whether they were derived from or mixed with hazardous wastes, is no longer necessary. Thus, the rigidity of the mixture and derived-from rules is unwarranted and constitutes an undue burden on much of the regulated community.[...]

MDF2 - IPC, WHWP-00083, 2, 1 Industry Assn.
IPC commends EPA for attempting to propose a self-implementing procedure, which would allow waste generators to exempt low-risk solid wastes from the Resource Conservation and Recovery Act's (RCRA) hazardous waste management system (Subtitle C). Subtitle C management is extremely costly and administratively burdensome for waste generators. Yet, due to the overly-broad application of EPA's mixture and derived-from rules, waste generators, including IPC members, are currently required to apply Subtitle C waste management requirements to materials which the EPA classifies as hazardous but which pose little or no threat to the environment or to human health. Such compliance is unnecessary and unauthorized by RCRA 1/. In addition, Subtitle C waste management contradicts both the intent and the literal title of the Resource Conservation and Recovery Act by discouraging material recovery, thereby, increasing the consumption - not the conservation - of virgin resources, such as copper. [...]

MDF2 - DoD, WHWP-L0004, 13, 2 Federal Govt.
DoD understands the need for the mixture rule, but believes that this rule has been the cause of much overregulation of low-risk wastes. If this rule is repromulgated, DoD asks that EPA commit to promulgating as expeditiously as possible a revised HWIR and other regulatory exemptions for low-risk wastes, mixtures, and derived-from waste residues.[...]

MDF2 - General Electric Co., WHWP-00193, 2, 1 Industry
The Agency lacks a clear vision for the future of the hazardous waste identification program. The hazardous waste identification system under RCRA is badly in need of reform. As the Agency is well aware, listed wastes that present little to no risk to human health or the environment are subject to the full panoply of Subtitle C regulations and once captured in the system, must overcome the extremely high hurdles of the delisting program in order to exit the system. Meanwhile, an additional seven billion tons of industrial waste generated per year, some proportion of which clearly poses risks as managed today, is not subject to federal regulation at all. This discrepancy is unsound from an environmental perspective, is based on antiquated perceptions of how waste is actually managed, and is a major flaw in the program. It is costly to waste generating industries and it adversely affects the credibility of the Agency. The Agency is long overdue in developing a strategy to address the problem of over- and under-regulation and to

put in place the long talked about but never implemented RCRA continuum of control, which would make the stringency of regulation consistent with the level of risk presented. The remand of the mixture and derived-from rules in 1991 provided EPA with the perfect opportunity to develop, articulate and begin to implement a long range plan to address these issues. [...]

MDF2 - Horsehead Resource Dev. Co., WHWP-00190, 3, 3 Waste Mgmt. Co.
The derived-from and mixture rules often impose harsh and unreasonable management requirements on low-risk wastes regulated under RCRA Subtitle C. As the U.S. Court of Appeals has observed, "the derived-from rule becomes counterintuitive as applied to processes designed to render wastes nonhazardous. Rather than presuming that these processes will achieve their goals, the derived-from rule assumes their failure." EPA concedes that these rules have "led to over-regulation of low risk hazardous wastes, which has become an increasingly important problem as the requirements for waste management have become more stringent and costly over time."

MDF2 - General Electric Co., WH2P-00005, 1, 1 Industry
The General Electric Company (GE) is pleased to submit comments on the U.S. Environmental Protection Agency's (EPA's or the Agency's) notice proposing amendments to the mixture and derived-from rules under the Resource Conservation and Recovery Act (RCRA). 64 FR 63382; November 19, 1999. GE has a substantial interest in the Agency's proposal since many of GE's facilities are regulated as hazardous waste generators and a few are regulated as treatment, storage, or disposal facilities. Over the years, management of dilute hazardous waste mixtures and residues derived from the treatment of hazardous wastes has imposed a significant financial burden on GE's businesses that has not contributed to protection of human health and the environment in any meaningful way.

MDF2- CMA, UIC Task Group, WHWP-00078, 3, 7 Industry Assn.
Create incentives for effective and innovative waste minimization and waste treatment. The existing RCRA regulatory approach creates many instances where excessive dollars are spent to prevent exposure to materials that no longer pose a hazard. For example, during management of wastes and process streams, many residues are generated with relatively low levels of hazardous constituent concentrations that must nonetheless be managed as hazardous waste because they are derived from a listed waste or are mixed with a listed hazardous waste. [...]

MDF1 & MDF2 - Eli Lilly and Company, WHWP-00201, 2,1 Industry
[...] The derived-from rule has no basis in fact and causes treatment residues from RCRA permitted treatment facilities to be managed in a very costly and inefficient manner. The derived-from rule is found in two section of the RCRA regulations which identify and list hazardous waste (40 CFR 261.3): (c) Unless and until it meets the criteria of paragraph (d) of this section: (1) A hazardous waste will remain a hazardous waste. (2)(i) Except as otherwise provided in paragraph (c)(2)(ii) of this section, any solid waste generated from the treatment,

storage or disposal of a hazardous waste, including any sludge, spill residue, ash emission control dust, or leachate (but not including precipitation run-off) is a hazardous waste .... (d) Any solid waste described in paragraph (c) of this section is not a hazardous waste if it meets the following criteria: (2) In the case of a waste which is a listed waste under subpart D of this part, contains a waste listed under subpart D of this part or is derived from a waste listed in subpart D of this part, it also has been excluded from paragraph (c) of this section under Sections 260.20 and 260.22 of this chapter. Thus, no matter what steps a generator takes to treat a listed hazardous waste, the waste can never be considered as anything but that listed waste unless the Agency reviews that waste stream through the delisting process. In practical terms, waste generators must continue to assign the listed waste code to any residues derived-from the treatment of a listed waste. Lilly utilizes many organic solvents in its pharmaceutical manufacturing operations. Many of these solvents are listed hazardous waste, such as spent solvents (F001-F005) or P-listed or U-listed commercial chemical products. Lilly has three manufacturing plants which have RCRA-permitted hazardous waste combustion units. Lilly uses these RCRA units to provide highly controlled, on-site management of wastes from its pharmaceutical manufacturing operations. In accordance with the RCRA permit and regulations, Lilly achieves 99.99% destruction of the organic solvents in these waste streams. However, despite the fact that the listed organics are effectively destroyed by the treatment process, the listed waste codes "carry through" the treatment process and attach to the treatment residues (e.g., scrubber water and ash). The residuals are no longer the waste which was listed, e.g., a spent solvent, yet the scrubber water and the ash continue to be designated as listed spent solvents. The derived-from rule is a legal fiction: even though the listed waste no longer exists, the treatment residuals must be managed as if the treatment had not occurred. The waste code carry-through required by the derived-from rule has the potential to create absurd results. If one of the listed codes that attached to the waste has an Land Disposal Restriction (LDR) technology standard of CMBST (incinerate or combust), the owner will be required to meet that technology before land disposal. If the owner is treating the scrubber water in a tank-based waste water treatment system, the sludge from the WWT system will also carry the listed codes of the incineration scrubber water. As shown in the diagram in Attachment A, this results in either incineration of WWTP sludge or incineration of the scrubber water. This is clearly treatment for treatment's sake. [Note: See hardcopy of WHWP-00201 to review Attachment A.] Lilly's experience with its permitted hazardous waste incinerators is that the organic solvents which are the basis of the F, P and U listing for the wastes incinerated are not present at levels of concern in the scrubber water or the incinerator ash. If the residuals from the treatment process were evaluated against the regulatory requirements for hazardous waste, as Lilly believes they should be, rather than being subject to the legal fiction of the derived-from rule, the residuals would not need to be managed as hazardous waste. [...]

MDF 2 - Eli Lilly and Company, WHWP-00201, 2,1 Industry

[...] The Agency acknowledged in adopting the rule and has continued to acknowledge in the more than 15 years since its adoption, that the derived-from rule results in the overregulation of many waste streams. The Agency stated that the mixture and derived-from rules "have resulted in unnecessarily stringent requirements for certain low risk wastes." 57 Fed. Reg. 21454. According to the Agency, the rules require management of "millions of tons of mixtures and derived-from

residuals" as hazardous waste even though they "actually pose quite low hazards." Id. at 21451. The initial device used by the Agency to avoid overregulation was to allow for a case-specific exemption from RCRA regulation, i.e., the delisting process. Both the Agency and waste generators have found the delisting process to be burdensome and time consuming, and in general, not a satisfactory resolution to the problem of overregulation under the derived-from rule.2 /In devising an alternative to the derived-from rule, the Agency should bear in mind the D.C. Circuit's observation in Shell Oil Co. v. EPA, 950 F.2d 741 (D.C. Cir. 1991), that "the derived-from rule becomes counterintuitive as applied to processes designed to render wastes nonhazardous. Rather than presuming that these processes will achieve their goals, the derived-from rule assumes their failure." Id. at 752. While it is true that, in deciding the case on procedural grounds, the Court in Shell Oil did not reach the merits of petitioners' challenges, this statement signals that the Court was receptive to the merits of those challenges and in all likelihood would rule, if given the opportunity, that the derived-from rules exceed the Agency's statutory authority. The HWIR proposal is an inadequate remedy for the problem of overregulation of derived-from wastes. [...]

MDF2 - Eli Lilly and Company, WHWP-00201, 2,1 Industry
[...]Eliminating the derived-from rule would be a common sense reform of RCRA to reduce what the Agency has admitted is unnecessary overregulation of many wastes. Indeed, it is counterintuitive for the LDR standards to require combustion as the appropriate treatment technology for many wastes, and yet for the derived-from rule to essentially ignore the existence of the treatment process and to require the listed waste codes for which CMBST is the treatment technology, to carry through the treatment process to the residuals. 4. Recent Congressional action in adopting H.R. 2036 demonstrates that Congress wants RCRA to be reformed to provide common sense solutions and regulate only substantial risks. [...]

MDF2 - ASARCO, Inc., WHWP-00125, 3, 1 Industry
[...] The mixture and derived-from rules are fatally flawed because they were based on unsupported assumptions about waste management practices. The mixture rule was originally promulgated as a disincentive to improper dilution of hazardous waste in lieu of proper treatment. 45 Fed. Reg. 33095 (May 19, 1980). Similarly, the derived-from rule was adopted as a means to prevent generators from minimally processing a listed hazardous waste and then claiming that the resulting waste derivative was no longer the listed waste. 57 Fed. Reg. 7628 (May 20, 1992). Both rules have long outlived their usefulness, even assuming for the sake of argument that there was some original justification for them. Additionally, both rules were promulgated at a time when EPA may have arguably had greater cause to take an overly stringent position on such issues. EPA has presented little or no factual documentation from the 16 years of RCRA Subtitle C implementation to provide support for these rules. [...]

MDF2 - ASARCO, Inc., WHWP-00125, 3, 1 Industry
[...] The mixture and derived-from rules subject to regulation as hazardous wastes large volumes of waste material that pose little or no risk to human health or the environment. These rules could lead potentially to a misallocation of resources (and associated public concern) to wastes that do not pose significant hazards. EPA should instead focus scarce public and private resources on the

management of wastes that are truly hazardous. Existing RCRA requirements (i.e., the identification of hazardous wastes on the basis of characteristics, listing, characteristics prohibitions on dilution, and other aspects) are adequate to ensure proper management under RCRA.

MDF1 & 2 - BP Amoco Chemicals, WH2P-00041, 1, 3 Industry
EPA's proposal to reinstate the mixture/derived-from rules falls far short of the Agency's obligation to make meaningful revisions to these regulations. The two narrow exemptions to the mixture/derived-from rules offered in the proposal do not meet EPA's Congressional mandate or the Agency's own goal to revise these rules in a meaningful way. The mixture/derived-from rules cause large volumes of nonhazardous wastes to be regulated under Subtitle C of RCRA with no proportionate benefit to human health or the environment. These regulations should not be reinstated until EPA makes significant revisions that limit the excessively broad scope of the mixture/derived-from rules.

MDF2 - SOCMA, WH2P-00035, 1, 3 Industry Assn.
[...] However, SOCMA still has many grave concerns with the latest HWIR proposal. The following is a brief list of issues and recommendations that SOCMA strongly suggests EPA address before a final revision to the mixture and derived from rules is published: EPA's proposed retention of the mixture and derived-from rules fail to provide any relief from the burdensome and unnecessarily broad impact of the current regulatory scheme SOCMA member company operations have been adversely affected by the unnecessary costs and burdens imposed by application of the mixture and derived-from rules to low-risk wastes. [...]

MDF2 - CMA, WH2P-00033, 4, 2 Industry Assn.
CMA's Interest In Reforming the Mixture And Derived-From Rules The hazardous waste management requirements of the Resource Conservation and Recovery Act (RCRA) impose complicated and expensive regulations on American industry. For example, CMA members generate more than 100 million tons of hazardous waste each year that must be identified and managed pursuant to strict requirements. CMA members operate hundreds of treatment, storage, and disposal facilities that need governmental approvals and thousands of different units that must also achieve stringent operation and design standards. CMA members are constantly seeking better ways to manage their wastes. In fact, all CMA members ascribe to CMA's Responsible Care© program which requires CMA members to operate their facilities in a safe and environmentally sound manner. Responsible Care also is a commitment that CMA members seek to continuously improve the way they operate their production facilities, distribute their product, and manage the wastes that they produce. This includes minimizing waste generation. Under this program, CMA members have reduced their waste generation by 60% since 1988, despite increasing their production by 30%.2 These large volumes of waste are not generated because the chemical industry is wasteful. Rather, these large volumes are generated because CMA members manufacture a large volume and variety of products. No manufacturing system is 100% efficient

and every chemical manufacturer generates waste. Each manufacturer, however, has an incentive to minimize its waste. The more product it manufactures, the more product it can sell. The waste it generates, the less it spends on waste management. Therefore, CMA members are constantly looking for ways to be more efficient, thereby minimizing wastes and maximizing their yield. Most of the hazardous wastes generated by the chemical industry are dilute wastewaters that are managed in wastewater treatment facilities regulated under the Clean Water Act. These wastes are treated by methods that destroy or remove more than 95% of the contaminants and meets stringent concentration and pollution loading restrictions, as well as rigorous biomonitoring requirements before it is discharged to wasters of the United States. The chemical industry also combusts large volumes of hazardous waste in units that destroy more than 99% of the hazardous contaminants. Under EPA's derived-from rule, these treated wastes must continue to be managed as if they were hazardous waste even if the treatment residue does not meet the statutory definition of hazardous waste. This rule, as the D.C. Circuit Court of Appeals has noted, is counterintuitive ... Rather than presuming that these processes will achieve their goals, the derived-from rule assumes their failure. However, as EPA knows, the treatment systems that our industry operates are highly effective. EPA's mixture rule, likewise, requires that mixtures of hazardous waste and other wastes must be managed as hazardous wastes, even though the mixture may no longer meet the statutory definition of hazardous waste, i.e., posing a significant threat to human health and the environment when it is improperly managed. [...]

MDF2 - General Electric Co., WH2P-00005, 3, 1 Industry
[...] EPA provides insufficient justification of an environmental need to impose the mixture and derived from rules. The examples given by EPA to illustrate that contaminants in certain wastes are more concentrated after treatment does not necessarily support the fact that the treatment residuals may pose a danger. This is particularly true in light of the fact that most of the analyses cited supporting this argument were prepared in the late 1980's and early 1990's before the long-term impacts of the LDR program on waste management were identifiable. The LDR program requires recharacterization of wastes after each step in a treatment train if the treatability group is changed. This is required when liquids are treated and sludges result, and in other scenarios in which the treatment train results in residuals in different physical forms from the original waste being treated. Leachate from hazardous waste landfills, EPA asserts, can contain high concentrations of organics and metals, even higher than the wastes that contributed to its generation. But the Toxicity Characteristic Leaching Procedure (TCLP) is designed specifically to evaluate leachate and addresses both organics and metals. If leachate --the exact form of waste the TCLP was designed to test -- passes that standard for identifying potential hazards to human health or the environment, there is no basis to consider such leachate a threat warranting further requirements under the mixture/derived from rule.

MDF9 & MDF2- Ciba-Geigy Corp., WHWP-00197, Ltr. Industry
Ciba is concerned that EPA's proposed rule is so conservative that it will not provide the necessary relief from the current over-regulation of low-risk wastes. For Ciba, incinerator ash and slag, and wastewater treatment sludge are the high volume, low risk process non-wastewater streams that are caught needlessly by the RCRA hazardous waste definition. Incinerator scrubber

water and landfill leachate are the high volume, low-risk wastewaters that we feel are inappropriately captured by the RCRA definitions of hazardous waste. We believe that these low-risk wastes should not be listed. To the extent the Agency is determined to attempt to list these wastes, the proper regulatory approach is to initiate a rulemaking using the full regulatory listing procedure for each of these waste types. The following are our main concerns and recommendations about the proposed rule. The rule as proposed sets exit levels and contingent management levels unreasonably low. Our comments show that many ordinary low hazard materials would not be able to exit using the modeled and extrapolated risk-based levels. [...]

MDF2 - CMA, WH2P-00033, 7, 1 Industry Assn.

EPA's Interest in Reforming the Mixture and derived-from rules EPA recognized that its mixture and derived-from rules were overly broad when it promulgated them in 1980. In the original rule, EPA stated: EPA recognizes that designating all waste mixtures containing listed wastes as hazardous wastes under Subtitle C may create some inequities. For example, this approach may result in some waste mixtures which contain only very small amounts of listed hazardous waste or which commingle waste in a way which renders them non-hazardous (e.g., neutralization) having to be managed under Subtitle C. We have tried to address this problem by establishing provisions for amending this paragraph to exclude waste mixtures produced by individual facilities, if they can show that the mixture (or each constituent listed hazardous waste) is not hazardous, based on the criteria for which the constituent hazardous wastes were listed. Because this is a rulemaking procedure, it will as a practical matter, only be useful for facilities which routinely mix wastes in relatively constant proportions. With a regulated community potentially numbering in the hundreds of thousands, we simply do not have the resources to process petitions for exempting one-shot waste mixtures. * * * We know of no other effective regulatory mechanism for dealing with waste mixtures containing listed hazardous wastes. Because the potential combinations of listed wastes and other wastes are infinite, we have been unable to devise any workable, broadly applicable formula which would distinguish between those waste mixtures which are and are not hazardous. If any members of the public have suggestions for other approaches, we would appreciate having them brought to our attention for future rulemaking. Likewise, EPA noted about the derived-from rule: This is the best regulatory approach we can devise at this time for dealing with solid wastes generated by hazardous waste management facilities. We are not now in a position to prescribe waste-specific treatment standards which would identify those processes which do or do not render wastes or treatment residues non-hazardous. Eighteen months later, EPA granted its first exclusions from the definition of hazardous waste. This rulemaking included the exclusion that EPA is proposing to update in the current Federal Register notice relating to mixtures of wastes that were listed solely for a characteristic. In the 1981 rule, EPA also promulgated its first contingent-management based exemptions for mixtures of listed hazardous wastes. These exemptions excluded waste mixtures that were managed in Clean Water Act regulated wastewater treatment facilities. In granting these exclusions the Agency noted the role that management of these wastes played in its decision. For example, in discussing the Agency's decision to exclude certain wastewater mixture solvents, the Agency noted: Second, the agency considered the factors listed in § 261.11(a)(3) to make a judgment about the concentration of spent solvents for each group that it deemed would not cause the wastewater mixture, if improperly managed, to pose a substantial hazard to human health or the environment. An important factor in the consideration

was the reduction of spent solvent concentrations that typically would be achieved in the treatment of the wastewater mixture before its intended or unintended (e.g., subsurface leakage) release into the environment. The Agency reasoned that virtually all of the wastewater mixtures covered by today's amendment will be given treatment, and that this treatment will typically be biological, physical or chemical treatment capable of reducing the spent solvent concentrations in the wastewater, particularly at the low concentrations assured by the limits selected. The Agency concluded that, if the spent solvent concentrations in the wastewater mixture prior to treatment are limited to 1 and 25 ppm, the wastewater treatment process will typically reduce these concentrations in any releases of the wastewater to levels that do not pose a substantial harm to human health or the environment. Management method also played a considerable role in excluding other waste mixtures. For example, the Agency found that chromium in K050 heat exchange bundle sludge would be treated by mixing with sulfide containing wastewaters that would reduce the chromium to a its trivalent, and non-harmful form. Thus, almost immediately after promulgation of the original hazardous waste identification rules the Agency began to rectify their over breadth by granting contingent-based management exclusions. As time went on, EPA recognized that it needed to tailor its listings more to the hazards presented by the wastes. So, in 1988, EPA explored a relisting concept based on waste concentration. Two years later, in EPA's landmark self-examination study, The Nation's Hazardous Waste Management Program at a Crossroads, EPA concluded that, because its delisting program had been ineffective, EPA needed to continue its efforts to develop a de minimis rule as a way of removing Subtitle C controls from low risk waste. In making this recommendation, EPA particularly noted that treatment residues should be exempt from further regulation. At the beginning of the current administration, EPA launched the RCRA Reform Initiative, which was designed to cure the over breadth of the mixture and derived-from rules. Indeed, mixture and derived-from rule reform was one of the cornerstones of the Clinton Administration's effort to reinvent RCRA. When the D.C. Circuit Court of Appeals remanded the mixture and derived-from rules to the Agency in the December 1991 Shell Oil decision, EPA, Congress, and the public invested large amounts of resources into exploring how to revise them. The Agency's first effort was to propose HWIR92 , a proposal that suggested two different options for curing the over broad mixture and derived-from rules a concentration-based exclusion system (CBEC) and an expanded characteristic (ECHO). In that proposal, EPA noted the over breadth of the rules and the increasing problems created by the derived-from rule, in particular: . . . the mixture and derived-from rules result in the regulation of certain low hazard wastes as hazardous. Many of these problems became of increasing significance with changes in RCRA, its regulations, and industrial practices since 1980. In 1984 Congress amended RCRA to ban all hazardous waste land disposal unless and until it had been with the best demonstrated available technology (BDAT). As treatment of hazardous waste began, the volume of residuals derived from treatment grew. These residuals often have low concentrations of hazardous constituents. EPA's analysis indicates that millions of tons of mixtures and derived-from residuals that must be managed as hazardous waste because of their history (i.e., what they were mixed with or derived from) may actually pose quite low hazards. **** 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 to human health or the environment

from mismanagement of waste (see RCRA section 1004(5)(B))9. Under the CBEC proposal EPA estimated that up to 82 million tons of hazardous waste would no longer be regulated under Subtitle C and would save the country $364 million each year. ECHO could produce similar savings and reductions in regulatory burden. EPA's proposal was so controversial - largely due to the short time frame that EPA was giving to comment on it that Congress prevented EPA from promulgating it until October 1, 1994. But Congress recognized the need to modify these two rules and commanded EPA to revise them by that date. After EPA withdrew HWIR92, the Agency chartered a federal advisory committee in July 1993 under which stakeholders failed to reach consensus on many key policy issues surrounding establishment of a concentration-based exit system. Still being required by Congress and now Court order to modify the mixture and derived-from rules, EPA proposed HWIR95 , which also suggested a concentration-based exit system. This proposal would have effected 56% of the facilities producing listed wastes, exempted 64.4 million tons of low hazard wastes or their treatment residuals, and could save the country approximately $75 million/year. That proposal was also roundly criticized and EPA has still not been able to develop a proposed concentration-based system. Thus, the current Federal Register notice is the third major proposal that the Agency has offered for comment on a concentration-based exclusion. EPA has been in litigation over this matter for more than 20 years. It is time that EPA devise other ways to provide relief from rules that it promulgated unlawfully and knew were overly broad at their inception. It is time that the Agency corrects this problem that is wasting the Nations resources with no commensurate increase in protection for human health and the environment. 45 Fed. Reg. 33,066, 33095 (May 19, 1980). 45 Fed. Reg. at 33,096. 46 Fed. Reg. 56,582 (November 17, 1981). 46 Fed. Reg. at 56,584-56,585. 53 Fed. Reg. 14,344, SAR Nos. 2482 and 2483 (April 25, 1988). HWSA brought a substantial amount of new wastes into or potentially into the Subtitle C system. Among the large numbers of types of wastes in the system, there is some subset that can be managed just as effectively in a less restrictive fashion - for example, listed hazardous wastes that contain a very small (de minimis) concentration of hazardous constituents after treatment. The Nation's Hazardous Waste Management Program at a Crossroads, The RCRA Implementation Study, EPA/590-SW-90-069, July 1990 at 39. 7. Summary Report to the President: The Presidential Regulatory Reform Initiative by the Environmental Protection Agency, June 15, 1995.

MDF2 - Eastman Kodak, WHWP-00065, 1, 1 Industry
Kodak Supports a Self-Implementing Risk-Based Mechanism to Remove Listed Hazardous Wastes from RCRA Subtitle C For many years Kodak has been concerned with the overbreadth of the "mixture and derived-from rules". They draw vast quantities of low risk wastes into the RCRA Subtitle C system while providing little recognition that the RCRA statute only authorizes regulation of wastes which pose a substantial hazard to human health or the environment. This has been particularly troubling for wastewaters which are ultimately managed and discharged under Clean Water Act permits. [...]

MDF2 & OTH11 - Onyx Environmental Services, WH2P-00015, 5, 2 Waste Mgmt. Co.
The agency also states in the preamble (Section III, C, page 63389) that without a "derived from" rule, hazardous waste generators could potentially evade regulation by minimally processing or

managing a hazardous waste and claiming that the resulting residue is no longer the listed waste, despite the continued hazards of the residue. OES agrees that entirely removing the "derived from" rule from the regulations may increase the potential for a generator to evade regulation through minimal processing or management of a hazardous waste. However, treating a listed waste to the applicable generic exclusion levels in a subpart O incineration unit, for example, is far from minimal processing. The resulting combustion residues would no longer bear the hazards that were present in the waste from which it was derived. In addition, the regulations and permit requirements applicable to permitted and interim status combustion facilities have become, and will continue to be, increasingly restrictive with the implementation of the Combustion MACT rule, Combustion of Inorganic Metal Bearing Wastes rule, and other recent rule making. Therefore, a specific exclusion for combustion residues, as proposed by OES, is an appropriate step to remove a large volume of low risk wastes from overly restrictive subtitle C regulation.

MDF2 - Phillips Petroleum Co., WH2P-00014, 2, 2 Industry
Phillips disagrees with EPA's characterization of the original mixture and derived-from rules as valid exercises of EPA's authority under RCRA. These rules subject vast quantities of waste to regulation without any demonstration that the wastes meet the criteria for listing a waste as hazardous under RCRA. That said, Phillips supports the proposed revisions to the mixture and derived-from rules as a first-step means to limit their overbroad scope. Phillips believes that the large and unproductive effort that EPA is currently undertaking to establish a concentration-based exit system for hazardous waste indicates that a concentration-based exit approach is too complicated. Instead, Phillips believes that EPA should address the overbreadth of the mixture and derived-from rules in a different way. Rather than determining exit criteria for listed hazardous wastes (i.e. generically what concentration levels in waste denote a hazardous waste), EPA could exclude certain wastes from the definition of hazardous waste based on the way that they are managed. In limited ways EPA has been excluding wastes from regulation contingent on proper management nearly since the inception of the program. For example, in 1981, EPA decided that mixtures of certain solvents should not be regulated as a hazardous waste if they were managed in wastewater treatment units that are regulated by the Clean Water Act. 40 C.F.R. § 261.3(a)(2)(iv)(A) and (B). Likewise, EPA has excluded releases of de minimis quantities of certain listed wastes if they are properly managed. 40 C.F.R. § 261.3(a)(2)(iv)(D). In addition, EPA has excluded waste derived residues from its definition of hazardous waste if it meets certain health-based limits. See 40 C.F.R. §266.112, Appendix VII. EPA has also excluded treatment residues derived from the aggressive biological treatment of petroleum refinery wastewaters. See 40 C.F.R. § 261.31 (F037 listing).[…]

MDF2 - Occidental Chem Corp., WH2P-00046, 1,3 Industry
OXYCHEM and OVLP's Interest In Reforming the Mixture And Derived-From Rules The hazardous waste management requirements of the Resource Conservation and Recovery Act (RCRA) imposes complicated and expensive regulations on American industry. OxyChem and OVLP, as CMA members are constantly seeking better ways to manage our wastes. In fact, all CMA members ascribe to CMA's Responsible Care™ program, a program that requires us to operate our facilities in a safe and environmentally sound manner. Responsible Care™ also is a

commitment that CMA members seek to continuously improve the way they operate their production facilities, distribute their product, and manage the wastes that they produce. This includes minimizing waste generation of most of the hazardous waste generated by the chemical industry in general and OxyChem and OVLP in particular, is dilute wastewaters that are managed in wastewater treatment facilities regulated under the Clean Water Act program. These wastes are treated by methods that destroys or removes more than 95% of the contaminants and meet stringent concentration and pollution loading restrictions before it is discharged to wasters of the United States Under the EPA policy of regulating hazardous wastes from "cradle to grave," these treated waste must continue to be managed as if they were hazardous waste even if the treatment residue does not meet the statutory definition of "hazardous waste." RCRA § 1004(5). For many years, CMA has been seeking reform of EPA's policy, the "derived-from" rule that requires continued regulation of such treated waste. This policy, as the D.C. Circuit Court of Appeals has noted, is "is counterintuitive . . .. Rather than presuming that these processes will achieve their goals, the derived-from rule assumes their failure." Shell Oil Co. v. EPA, 950 F.2d 741, 752. However, as EPA knows, the treatment systems that our industry operates are highly effective. EPA's mixture rule, likewise, means that mixtures of hazardous waste and other wastes must be managed as hazardous wastes, even though the mixture may no longer meet the statutory definition of hazardous waste, i.e, posing a significant threat to human health and the environment when it is improperly managed. RCRA § 1004(5) Consequently, CMA and its members have invested large amounts of resources urging EPA to revise these policies so that hazardous wastes are no longer regulated under Subtitle C when they cease to meet the statutory threshold for hazardous waste. For example, in 1989 CMA petitioned EPA to establish "de minimis" endpoints for mixtures and derived-from wastes. CMA served as a member of EPA's Federal Advisory Committee that discussed these issues. CMA also supported legislation that directed EPA to revise the mixture and derived-from rules by October 1, 1994 and sued EPA when it failed to meet the deadline. Pub. L. No. 102-389, 106 Stat. 1571.

MDF2 - Eastman Kodak, WH2P-00050, 1,2 Industry
INTRODUCTION Eastman has been actively communicating with the EPA for a number of years on HWIR issues, has worked with one of EPA’s contractors in providing a case study of an HWIR candidate stream, and has provided data to the Agency on more than one occasion in support of the Agency’s efforts to fix the MDF rules. We will continue to work with the Agency in any way we can to effect a good and useful HWIR rule. It is in that spirit of cooperation that Eastman will expand upon the following major points in this comments package: 1) This proposal fails to significantly address the problems posed by the MDF rules.

MDF2- Eastman Kodak, 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.

MDF2 - Chlorine Institute, WHWP-00224, 2,5 Industry Assn.
Exempting low-risk wastes that are into the Subtitle C system because of the "mixture", "derived from", and "contained-in" rules, would be beneficial because it would allow EPA to focus its regulatory activities on the wastes proposing the greatest risks -- thus increasing protection of human health and the environment and optimizing the allocation of the agency's limited resources.

HWIR & MDF2 - BFI, WHWP-00139, 38,3 Waste Mgmt Co.
[HWIR does not adequately solve many practical implementation problems for Subtitle D landfills caused by the mixture and derived from rules.] Over the years, BFI and many others have consistently pointed out the seemingly endless number of instances where the wooden application of the mixture and derived from rules has caused severe practical problems for the regulated community. More recently, the Agency has acknowledged these problems as widespread.

The Agency is offering the HWIR rulemaking as its singular solution to the manifold and very problematic issues arising from the application of the mixture and derived from rules. The Agency claims that: "This action should also give incentive for the development of innovative treatment technologies to render wastes less risky."

"Today's self-implementing exit proposal will reduce that burden significantly, ensuring that the mixture and derived from rules represent a reasonable approach to regulating these classes of wastes."

"The rules proposed today, however, allow rapid exemptions for mixture and derived from wastes that present no significant threats to human health and the environment." (See 60 FR 66348)

For the vast majority of the hazardous waste generator universe these statements are simply not true because the cost of complying with the HWIR rule far outstrips any benefit that the rule offers. For most generators, complying with the HWIR rule would result in higher overall costs than merely complying with the existing rules. Despite multimillion dollar effort in developing the HWIR rule, it does not believe that the rule offers practical relief from the excesses of the mixture and derived from rule in many situations where relief is warranted independent of the HWIR rulemaking.

Unfortunately, common sense has not been the hallmark of the Subtitle C program. This is true in part because the underlying statutory approach frequently makes common sense elusive, and in

part, because the HSWA amendments added new dimensions to the program in such a short order there was little time to make the program work more cohesively. Nevertheless, the continued inflexible application of the mixture and derived from rules has only served to bring to light the self-defeating complexity of the program and the desperate need to rationalize it. Unfortunately, the HWIR rulemaking thus far, rather offering significant improvement, extends the self-defeating complexity of the subtitle C program.

BFI finds it unacceptable that the Agency has concluded that the combination of the HWIR rule as proposed, and the extremely modest proposed modifications to the mixture and derived from rules are sufficient to overcome the myriad practical problems presented by the mixture and derived from rules. With more attention to implementation issues, and greater selectivity in specifying the kinds of units under Subtitle D that would be acceptable to receive HWIR exiting waste streams, the HWIR rule could offer a chance to deliver both the human health and environmental protection the public expects and to do so cost-effective manner.

MDF2 - Bethlehem Steel Corp., WH2P-00004, 10,5 Industry
EPA should identify any damage incidents it believes are associated with listed wastes, waste mixtures, and derived-from wastes that do not exhibit a characteristic of hazardous waste. To the extent that such damage incidents exist, the agency should consider focused regulations that would continue to classify the specific wastes at issue as hazardous, rather than adopting sweeping controls such as the mixture and derived-from rules.

MDF3 - Eastman Chemical Co., WHWP-00162, 8, 1 Industry
Eastman is not unique among manufacturing facilities in believing that the existing mixture/derived from rules are capturing many wastestreams that do not warrant management as hazardous wastes. These rules have added significant costs to the operation of manufacturing facilities throughout the nation, while providing insignificant benefits to human health and the environment. The generation of large quantities of hazardous wastewaters based solely on the practice of efficient, centralized wastewater treatment has led Eastman to evaluate the segregation of hazardous and NonHazardous wastewaters, to prevent the attachment of "hazardous" to those NonHazardous wastewaters due to the mixture/derived from rules. Such a project would result in a second treatment facility and much re-piping, with the net result that millions of dollars would be expended and there would be no improvement in the wastewaters ultimately discharged to the environment through two, rather than one, discharge point. All that would be achieved is an apparent reduction in hazardous waste generation which does not, in reality, represent a decrease in waste generation, treatment and discharge, but rather a reporting game and artificial waste minimization driven by EPA requirements. It is this kind of "game" that compromises the credibility of both EPA and the regulated community. [...]

MDF3 - SOCMA, WH2P-00035, 7, 2 Industry Assn.
EPA's Proposed Retention of the Mixture and Derived-From Rules Fails To Provide Any Relief from the Burdensome and Unnecessarily Broad Impact of the Current Regulatory Scheme SOCMA and its members are disappointed that EPA has failed to propose any significant substantive relief from the overly broad regulatory scheme established by the mixture and derived-from rules in 40 C.F.R. §§ 261.3(a)(2)(iii), (iv) & 261.3(c)(2)(I). While it may have been useful for EPA to use such a broad regulatory tool in 1980 at the start of the RCRA program, the Agency's continued failure to refine and improve on this approach for twenty years is more difficult to understand. As is discussed below, the unnecessary costs and burdens imposed by these rules are readily apparent to SOCMA members. A. The Nature of Batch and Custom Chemical Manufacturing Operations Many SOCMA members engage in batch and custom chemical manufacturing operations. Often, these operations are disadvantaged by the fact that environmental regulations are typically crafted with one paradigm in mind, that of a continuous manufacturing process. Batch and custom chemical manufacturing operations differ from constant, single-product chemical operations in a number of ways. Batch processing provides an efficient and frequently the only method to make small quantities of chemicals to meet specific needs and consumer demands for specialized products. Batch processors must be able to respond quickly to new requirements from customers, fill small market niches and develop new products. This segment of the chemical industry retains a high degree of entrepreneurship and must retain the flexibility to meet ever-changing needs and technological developments. Batch processes are distinct from continuous operations in that a continuous operation has a constant raw material feed to each unit operation and continual product withdrawal from each unit operation. A batch process has an intermittent introduction of frequently changing raw materials into the process and varying process conditions imposed on the process within the same vessel. As a result, the waste streams generated by a single batch processing

facility can vary substantially over time, particularly as compared with the waste streams generated by a continuously operating process. There are two other differences between custom and commodity chemical manufacturing that are worth noting. Batch and custom chemical manufacturers may use the same equipment to make small quantities of 10, 20 or even more different products, whereas continuous manufacturers may use dedicated equipment to produce large quantities of the same product. In addition, batch or custom chemicals are often manufactured in a brief production campaign for a focused time period, whereas continuous products are normally made year round. Thus, batch-manufacturing operations are often the generators of numerous waste streams that reflect the changing product mix characteristic of this manufacturing sector. Batch processing provides an efficient (and frequently the only) method to make small quantities of chemicals to meet specific needs and consumer demands for specialized products. Batch processors must be able to respond quickly to new requirements by customers, fill small market niches and develop new products. They are at the cutting edge of new technology, provide products often made nowhere else in the world and help keep imports down by responding quickly to customer demands for service and delivery. This segment of the chemical industry retains a high degree of entrepreneurship and must retain the flexibility to meet ever-changing needs and new technological developments. [...]

MDF3 - SOCMA, WH2P-00035, 10, 1 Industry Assn.
SOCMA Member Company Operations Have Been Adversely Affected by the Unnecessary Costs and Burdens Imposed by Application of the Mixture and Derived-from Rules to Low-Risk Wastes In connection with the development of these comments, SOCMA solicited examples of the costs imposed by the mixture and derived-from rules from a number of member companies. The actual costs borne by companies are easy to identify: on-site storage costs, paperwork and administrative costs, higher shipping and transportation costs, and higher treatment, storage and disposal costs. Not surprisingly, these are the same types of costs analyzed and tallied by EPA in documenting the cost savings it attributes to the ICR listed waste modification discussed in Section II below. SOCMA thought it might be helpful to share some specific waste management scenarios that illustrate how the mixture and derived-from rules are presently causing SOCMA members to incur unnecessary costs as a result of having to manage low-risk wastes as Subtitle C hazardous waste. The examples set out below provide a good illustration of the range of low-risk waste streams for which the automatic carry-through of a listed waste code results needs to be re-evaluated. One SOCMA member uses a process that involves a metals precipitation step to remove arsenic. The treated water carries a listed waste code solely due to the mixture and derived-from rules. The actual concentration of arsenic in the wastewater is significantly below the toxicity characteristic level of 5 ppm. The wastewater flow continues through an on-site biological treatment system, carrying the listed waste code with it. As a result, the wastewater treatment system biological solids also carry the listed code due to the further application of the mixture and derived-from rules. The actual arsenic concentration of the arsenic in the biosolids is significantly less than 0.5 ppm. Management of these biosolids as a listed hazardous waste imposes significant costs on this SOCMA member, with no consequent environmental benefits. Another SOCMA member facility has a Regenerative Thermal Oxidizer (RTO) that receives methylene chloride and methanol from its process vent streams. The RTO operates at 1650/ F in the burn chamber. The facility had to complete repairs on the burn chamber inner surfaces and replace large sections of the refractory.

Because the refractory had been in contact with methylene chloride and methanol, the waste had to be classified as hazardous and carry the F002 and F003 waste codes, even though the facility had analytical results showing Non-Detect for both constituents. Absent the mixture and derived-from rules, this material would not (and should not) have been classified as a hazardous waste. The additional cost of disposal of this waste due to the application of the derived-from rules was about $40,000. A different SOCMA member has a facility at which ethylene oxide is used as a reactant. Ethylene oxide is listed, as U115, for Ignitability (I) and Toxicity (T). Ethylene oxide is extremely reactive. In the event of an emergency, such as a runaway reaction, the facility releases the reactor contents into an emergency water quench tank and the reaction stops. In one emergency incident, approximately 2,000 pounds of ethylene oxide had to be released into approximately 125,000 gallons of water (1,042,500 pounds). Flushing the system to clear the unreacted ethylene oxide generated an additional 30-40,000 gallons of water (about 300,000 pounds). As a result of the mixture rule, the entire resulting volume of wastewater was classified as a listed hazardous waste, even though the ethylene oxide was present at less than 1 percent. This classification was particularly inapt in this case since ethylene oxide turns into ethylene glycol in water. The resulting water/ethylene glycol mixture is a low-risk stream that could be effectively treated in the facility's on-site wastewater treatment plant. However, due to the mixture rule, even though the ethylene oxide completely reacts and disappears, the mixture still carries the listed waste code. Consequently, use of the facility's wastewater treatment plant is precluded. Delisting the mixture was not an option, as the facility could only store the mixture on-site for 90 days. Since the applicable treatment standard is incineration, the facility was required to incinerate the mixture at an approximate cost of $ 156,000 (1,300,000 lbs. x $0.12). One SOCMA member operates an on-site hazardous waste incinerator that is used to incinerate liquid wastes generated on-site. Two to three times each year, the facility conducts maintenance operations on the refractory and generates refractory waste. Tests confirm that the brick does not exhibit any characteristics; nor are there any detectable levels of any of the listed waste streams managed in the unit. The facility also power washes the tube in the unit since it has a boiler section used for steam recovery. The resulting wash waters and associated solids also fail to exhibit any characteristics or contain any detectable levels of any of the listed wastes treated in the unit. The cost to the facility of managing the washwater is typically $0.15 - .18 per pound, with 2250 pounds being generated in 1999. The cost for disposal only for the refractory brick averages $185 per yard, with 12.3 tons being disposed of in 1999. In addition, due to the limited number of permitted facilities able to manage this waste, the company often incurs substantial demurrage charges for the containers used to collect and transport the material. As is apparent from these examples, the mixture and derived-from rules frequently cause waste-codes to be carried through and applied to wastes that are fundamentally different from the original waste considered in the development or the listing classification. There are many instances, as demonstrated above, in which the risk associated with the original listed waste simply does not carry through in the same way. The composition of and nature of any risk posed by these materials often bears little or no relationship to the original listed waste. The costs and impacts of this automatic waste-code carry-through are quite significant. Even where the dollar value might not register as significant in terms of EPA's approach to regulatory impact analysis, the actual impact is considered significant by SOCMA members, 70% of which qualify as small businesses. A further significant cost of the current regulatory regime is the extra time and effort required evaluating and applying the mixture and derived-from rules in the real world. Even after twenty years, facilities still have difficulty

evaluating when, whether and why certain waste streams must be managed as Subtitle C hazardous wastes under this approach. The gap between common sense and the real world on the one hand, and the expansive and unlimited impact of the mixture and derived-from rules on the other, frequently causes companies to need expert advice on regulatory waste classification issues. Smaller companies and facilities that lack the budget for or ready access to such expertise must take the conservative course. Once again, this causes additional low-risk wastes to be managed as Subtitle C wastes, which requires the incurrence of additional costs with little or no environmental benefit.

MDF3 - Eli Lilly and Co., WHWP-00201, 2,1 Industry
[...]Managing the residuals as if they are listed hazardous waste is significantly more expensive than managing the waste in accordance with solid waste regulations. For example, Lilly estimates that in 1995 transportation and disposal of ash from Lilly's one hazardous solids incinerator cost approximately $185,000. The ash could be managed in a state permitted Subtitle D landfill as non-hazardous waste for about $25,000. [...]

MDF3 & HWIR - Dow, WHWP-00185, 9, 1 Industry
Dow supports EPA efforts to revise the MDR. These rules have resulted in significant expense for Dow to deal with low risk wastes. This expense caused by the RCRA system diverted resources away from greater environmental opportunities. Dow has spent millions of dollars to deal with the MDR issues and much of the expense is not justified based on the risk the wastes pose. This approach is an improvement from the delisting approach which has not worked well for Dow. However the proposal is still complex, particularly in relationship to LDR levels, and could be simplified.

MDF3 - Uniroyal Chemical Co., WHWP-00219, 1,1 Industry
Uniroyal Chemical has been following the regulatory and legal proceedings related to the mixture and derived from rule with an expectation that we would enjoy some small degree of regulatory relief from the anticipated amendments. Unfortunately, our review of the proposed rule deflates our expectations.

MDF4 - American Iron and Steel Inst., WHWP-00165, 27, 2 Industry Assn.
[...] EPA has completely ignored the risks that are likely to be created by continued classification of waste mixtures and derivatives as hazardous wastes (e.g., the risks of longer-range waste transport and the risks to waste management personnel), even though such risks are almost certain to be greater than the risks considered by the Agency (i.e., the risks avoided by classification of waste mixtures and derivatives as hazardous wastes). In this way, EPA has performed only half of a risk assessment, and probably the less significant half, at that. Cf. Corrosion Proof Fittings, 947 F.2d at 1224 (requiring EPA to consider the risks caused by a regulation, as well as the risks avoided by the regulation). In light of these problems, and others identified by Cambridge and the SAB, EPA must modify substantially its proposed risk assessment methodology. Only by eliminating the errors and overly conservative assumptions in its methodology can the Agency develop a workable, supportable, and realistic set of risk-based exit levels.

MDF4 - Bethlehem Steel Corp., WH2P-00004, 1, 3 Industry
EPA needs to consider unintended consequences. 1. EPA's purpose in the HWIR proposal rule is to prevent harm to human health and the environment. 64 Fed. Reg. at 63382. 2. The HWIR proposal would establish criteria to classify wastes as hazardous or non-hazardous. EPA supports these criteria with a computer model designed to simulate migration of chemicals from wastes over a 10,000 year time frame. 3. EPA needs to consider the potential that its classification criteria will create unintended consequences that might increase risks. 4. This need to evaluate unintended consequences is just common sense. 5. More formally, the 1997 report of the Presidential/Congressional Commission on Risk Assessment and Risk Management concludes that tradeoffs among different risks must be identified and considered in conducting a risk analysis. (p. 35). The Commission continues: Analysis must consider whether an option may cause any adverse consequences. One of the most important is the potential for an option to increase one type of risk while reducing the risk of concern. 6. EPA recognizes this need to consider unintended consequences. For example, in its March 1999 Residual Risk Report to Congress under the Clean Air Act, EPA explained: the Agency will consider significant negative health and environmental consequences and the risk-risk tradeoffs associated with any future standards. (p. 102). 7. Recent court decisions have also emphasized that rational rulemaking requires consideration of unintended consequences. In American Trucking Associations v. U.S. EPA, 175 F.3d 1027 (D.C. Cir. 1999), the court of appeals found that EPA had acted unlawfully when it set standards to reduce ozone levels without considering the new, unintended risks that might be created as a result of increased exposure of people to ultraviolet radiation. (This portion of the decision has not been appealed by EPA and was not questioned by any of the judges who heard EPA's subsequent requests for reconsideration). 8. EPA has spent years to develop the computer model that is the basis of the HWIR proposal. The agency has also developed thousands of pages of supporting analysis, which is contained in the administrative record. As far as Bethlehem can tell, none of the agency's analysis considers the potential for the proposal to have unintended consequences. 9. An analysis of unintended consequences does not need to be elaborate. A simple example follows based on transportation risks. Bethlehem Steel respectfully urges EPA to

perform its own analyses to identify unintended risks. The HWIR criteria are too restrictive. They create unintended, transportation risks that are worse than the chemical risks EPA seeks to prevent. 10. A simple analysis shows that the classification criteria that EPA proposes in the HWIR are too restrictive. In particular, these criteria will cause unintended transportation risks that are worse than the chemical risks EPA seeks to prevent. 11. Under EPA's regulations, waste that is classified as hazardous may be disposed in a landfill only if the landfill has special permits to receive the waste. 40 C.F.R. § 262.20(b); 40 C.F.R. § 264 Subpart N. 12. Relatively few landfills qualify for these special permits. In Indiana, where Bethlehem's flagship steel mill is located, the Department of Environmental Management lists only one landfill eligible to receive hazardous wastes (Chemical Waste Management, Allen County). 13. Indiana is actually ahead of many other states in this regard. In its National Capacity Assessment Report, EPA lists 24 states as having zero landfill space for hazardous wastes. 14. By comparison, landfills that receive non-hazardous solid waste are common. As of 1988, EPA estimated that there were approximately 9,300 municipal solid waste landfills in the United States. See 60 Fed. Reg. 50804, 50938 (September 29, 1995). 15. One of the immediate consequences of classifying a waste as hazardous is that it must be transported over much longer distances to reach one of the few, permitted landfills. 16. For Bethlehem's Burns Harbor Division, the nearest landfill that can receive hazardous wastes is more than 100 miles more distant than the nearest solid waste landfill. (Please see the map on the next page). 17. This 100 mile difference appears to be typical, perhaps even on the low side nationally, considering the many states that have no hazardous waste landfills at all. 18. Transporting wastes creates a low but real level of risk. These risks increase with distance. 19. The level of these risks can be reasonably approximated. According to the Department of Transportation, about 1.7 fatalities occurred in 1998 for each 100 million vehicle miles driven. Transportation Statistics Annual Report, 1998, p. 86. 20. Based on this figure, the risks associated with driving an extra 200 miles (100 miles each way) to dispose of a waste shipment at a hazardous waste landfill instead of a solid waste landfill is: (200 miles per trip) x (1.7 fatalities/100 million miles) = 3.4 x 10-6 per trip Where 10-6 is EPA's common style of expressing a 1 in one million risk of fatality. 21. The simple calculation above applies to a single truckload, which is about 10 tons of material. EPA estimates in its proposals that large generators may produce more than 10,000 tons of hazardous waste per year. 64 Fed. Reg. at 63,409. The risks associated with transporting this volume of waste would be approximately: (3.4 x 10-6 per trip x 10,000 tons/year) ÷ (10 tons/trip) = 3.4 x 10-3 per year Where 10-3 is a 1 in one thousand risk of fatality. 22. These figures are approximations, of course, but they are based on real data and reflect common sense. A thousand trips of 200 miles distance is a lot of driving. Some of those trips will occur in bad weather. Sometimes the driver may be tired or otherwise impaired, or he may encounter another vehicle with a tired or impaired driver. A risk estimate of 3.4 x 10-3 for this amount of activity is reasonable. 23. In its HWIR proposal, EPA proposes to classify wastes as hazardous, and so require transportation over long distances, based on risks that are much smaller than this 3.4 x 10-3 risk level. 24. To simplify a bit, under the least restrictive option EPA proposes, the agency would classify a waste as hazardous if it might expose 5% of the people who live near an industrial site to a maximum 10-5 (1 in 100,000) lifetime risk. 64 Fed. Reg. at 63441. 25. Under other options, EPA would classify a waste as hazardous if it might expose 1% of the people who live near an industrial site to a maximum 10-6 lifetime risk. Id. 26. EPA recognizes that these 10-5 or 10-6 risk levels are intentionally overstated (conservative, in the agency's parlance). 64 Fed. Reg. at 63432. 27. EPA does not identify the degree of this overstatement of

risk in its proposal, but a few of these factors can readily be identified. EPA proposes that this risk level must be verified through statistical analysis of waste samples at the 90% to 98% confidence level. 64 Fed. Reg. at 63401. The risk level also incorporates a 95% upper confidence value applied to the underlying toxicological studies, 64 Fed. Reg. at 63,419, as well as a series of other conservative toxicological assumptions. 28. In performing its calculations for the 10-5 or 10-6 classification level, EPA also declines to consider any protective effect from liners, groundwater monitoring systems, and other engineering controls, which are common at solid waste landfills. 64 Fed. Reg. at 63,452. 29. Moreover, EPA proposes to apply this 10-5 or 10-6 classification level based on risks that it believes might occur over a 10,000 year time frame. 64 Fed. Reg. at 63417. 30. It does not make sense to incur real transportation risks on the order of 10-3 to prevent a chemical risk on the order of 10-5 or 10-6. 31. All the more, it does not make sense to incur these transportation risks when the 10-5 or 10-6 risks are intentionally overstated and extrapolated into the remote future. 32. Bethlehem Steel respectfully urges EPA to perform its own analysis of these unintended consequences. As the simple example in the preceding paragraphs should indicate, this analysis does not need to be elaborate to provide a reasonable approximation of unintended risks that are likely to be created. 33. If the agency conducts this analysis, it should also include an evaluation of increased risks to workers who operate heavy equipment to excavate wastes or to construct landfill-style caps to comply with hazardous waste requirements. 34. EPA has spent the better part of a decade working on the HWIR proposal, and it is still far from finished. It would be a tragic waste if all of this effort produced criteria for classifying waste as hazardous that create more harm than good for public health. 35. Bethlehem believes that the transportation risks described above and the other risks that EPA would likely identify in such an analysis support two major changes to the agency's HWIR proposal. These changes are described below.

MDF4 - Bethlehem Steel Corp., WH2P-00004, 8,1 Industry
[...] 49. The mixture rule creates unintended transportation risks and other risks by classifying large volumes of wastes as legally hazardous. For wastes that do not exhibit a hazardous characteristic, these unintended risks appear to be greater than any chemical risks that may be associated with the waste. Bethlehem encourages EPA to evaluate these unintended consequences specifically as they apply to the mixture rule. 50. EPA justifies the mixture rule as a means to prevent evasion of the hazardous waste laws. According to the agency, some generators would alter their waste to the point it no longer meets the listing description without detoxifying, immobilizing, or otherwise actually treating the waste. 64 Fed. Reg. at 63389. [...]

MDF4 - M. Shere, WHWP-00174, 9,2 Citizen
In the HWIR proposal the agency apparently assumes that its regulations will have no unintended consequences. Indeed, the agency does not even consider the possibility that a greater degree of regulatory control may be more risky. This is clearly incorrect. 1/

If a waste is legally "hazardous," it cannot be disposed at a conventional, "Subtitle D" landfill for solid wastes, but may only be placed in a special, "Subtitle C" landfill that has additional protective features for hazardous wastes. In what appears to be the agency's most recent estimate,

it identified a universe of approximately 6,000 Subtitle D landfills. 2/ Though this number has been declining, it is still safe to say that dozens of Subtitle D landfills are available in each of the more heavily industrialized states. Subtitle C landfills, by contrast, are few and far between. For example, in northwest Indiana (the nation's leading steel center), hazardous wastes must be trucked an extra 100 miles for disposal compared to non-hazardous wastes.

This extra distance creates significant new risks because driving is one of the most dangerous activities that people perform, and virtually everyone is a member of the exposed population. The result is that transportation risks created by hazardous waste controls can "dwarf the estimated maximum cancer risks" that EPA seeks to regulate. 3/

Moreover, where wastes will be disposed on site, rather than driven to a new disposal location, the "hazardous waste" label often means extensive work to consolidate and cap the wastes, among other duties. 4/ Here too, the "fatality risks to workers . . . are orders of magnitude greater than the . . . [10 -6] cancer criteria" that EPA uses. 5/

It is unclear why EPA did not consider these traffic and worker risks, especially given the detail of the agency's analysis in other areas. For example, EPA included in the HWIR a "vehicle traffic" analysis that estimates the emissions of ash that might blow from trucks as they make waste deliveries. 6/ Does the agency really believe that people are more likely to be hurt by incidental ash flakes that blow from trucks than by direct collisions with the trucks themselves? The HWIR proposal does not say. What is clear is that the agency has conducted only half a risk assessment. The agency has failed to consider any of the additional risks that the HWIR proposal may pose as compared to less restrictive alternatives.

1/ See, e.g., Albert Nichols and Richard Zeckhauser, "The Perils of Prudence: How Conservative Risk Assessments Distort Regulation," 8 Toxicology and Pharmacology 61, 66 (1988) ("Whether conservative risk assessments lead to policies which increase or decrease risk is an open question; they may well raise both costs and overall risk").

2/ EPA, Solid Waste Disposal Facility Criteria; Final Rule, 56 Fed. Reg. 50,978, 50, 988 (October 9, 1991) (1986 figure).

3/ See, e.g., Thomas Mar, et al., "Physical Injury Risk versus Risk from Hazardous Waste Remediation," 17 Reg. Toxicology & Pharmacology 130, 132.

4/ See, e.g., 40 C.F.R. Sections 264.110 - 264.120, 265.110 - 265.120 (closure and post-closure standards for hazardous waste management units).

5/ Alan Hoskin, et al., "Estimated Risk of Occupational Fatalities Associated with Hazardous Waste Site Remediation," 14 Risk Analysis 1,011, 1,016 (1994).

6/ 60 Fed. Reg. at 66,359 - 66,360.

MDF5 - National Coil Coaters Assn., WHWP-00192, 6, 1 Industry Assn.
[...] 2/ Moreover, the mixture and derived-from rules (and the hazardous waste listings themselves) may be counterproductive from an environmental perspective, because facilities have less of an incentive to reduce their generation of truly "hazardous" wastes, for example through the use of more innocuous raw materials or more effective treatment processes, when the wastes remain classified as hazardous wastes regardless of the concentrations of hazardous constituents that they contain. [...]

MDF5 - Capital Returns, Inc., WHWP-00160, 3, 2 Other
[...] 2/ Moreover, the mixture and derived-from rules may be counterproductive from an environmental perspective, because facilities have less of an incentive to reduce their generation of truly "hazardous" wastes, for example through the use of more innocuous raw materials or more effective treatment processes, when the wastes remain classified as hazardous wastes regardless of the concentrations of hazardous constituents that they contain. [...]

MDF5- Capital Returns, Inc., WHWP-00160, 5, 2 Other
[...] In other cases, the automatic application of the hazardous waste listings, as with the automatic application of the mixture and derived-from rules, and attendant Subtitle C duties serve as a disincentive for facilities to take advantage of different raw materials or to alter their processes to reduce the generation of truly "hazardous" waste, thereby thwarting RCRA's pollution prevention goals. If all the waste meeting a broad listing description will be deemed hazardous and have to be regulated as such regardless of its own characteristics, why should a facility invest in changes that will make no regulatory difference, particularly where such changes may have at least some adverse cost and product quality consequences. Provision of an appropriate risk-based exit will address these disincentives. [...]

MDF5 - American Iron and Steel Inst., WHWP-00165, 4, 3 Industry Assn.
[...] RCRA 1004(5). Moreover, the mixture and derived-from rules may be counterproductive from an environmental perspective, because facilities have less of an incentive to reduce their generation of truly "hazardous" wastes, for example through the use of more innocuous raw materials or more effective treatment processes, when the wastes remain classified as hazardous wastes regardless of the concentrations of hazardous constituents that they contain. [...]

MDF5 - National Coil Coaters Assn., WHWP-00192, 9, 1 Industry Assn.
An appropriate exit should be [provided for listed waste F019 and for mixtures and treatment residuals therefrom.] Wastewater treatment sludges from the chemical conversion coating of aluminum are deemed listed waste F019 and must be managed as such regardless of their own characteristics. See 40 C.F.R. Section 261.31. Mixtures of such sludges with other solid wastes

and residuals from the treatment of such sludges are also deemed hazardous wastes (i.e., F019) by virtue of the mixture and derived-from rules, again regardless of the characteristics of the wastes. See 40 C.F.R. Section 261.3. Coil coaters who conduct conversion coating of aluminum accordingly may generate F019 wastes.1 /F019 was listed as a hazardous waste due to the expected presence of hexavalent chromium and cyanide. See 40 C.F.R. Part 261, Appendix VII. In virtually all cases, cyanide has now been eliminated from coil coaters' processes.2/ Similarly, some aluminum conversion coating processes are now conducted with non-chrome materials or, where chrome is used, with trivalent rather than hexavalent chrome materials unless a specific chrome or hexavalent application is requested by the customer. Indeed, hexavalent chrome applications are not commonly used by NCCA members that coil coat. Nonetheless, coil coaters have not received any regulatory relief from these environmentally beneficial changes; the F019 listing and mixture and derived-from rules automatically apply to all sludges from the conversion coating of aluminum regardless of whether they contain cyanide or hexavalent chromium or any chromium at all. In fact, the general problem inherent to the hazardous waste listings and mixture and derived-from rules, i.e., that they serve as a disincentive for process and raw material changes that might lower the hazards posed by resultant wastes, is particularly true with respect to the F019 listing. In the cases where coil coaters have a choice as to the raw materials they use or the process employed, the hazardous waste system provides a disincentive -- or at least no incentive, given possible cost and product quality concerns associated with raw material or process substitutions -- to change. A workable exit from this system is thus necessary and appropriate. 1/ While NCCA's comments focus primarily on F019, many of the comments are broadly applicable to other listed wastes, to the various "hazardous constituents" identified by EPA, and to EPA's overall approach under the HWIR proposal. Accordingly, NCCA's comments should not be interpreted as limited to F019, unless a specific point is identified by NCCA as applying only to F019. 2/ In some cases, however, even when cyanide is not used anywhere in a particular coil coaters' process, the test method for cyanide results in "false positives" for cyanide. EPA should revise the test method for cyanide to eliminate this problem. [...]

MDF5 - Nucor Corp., WHWP-00215, 1, 1 Industry
Nucor Corporation (Nucor) is writing to support the Agency's proposed Hazardous Waste Identification Rule (HWIR). Nucor believes that the HWIR represents an appropriate step toward a risk based hazardous waste management system. Nucor is one of the nation's largest steel recycling and fabrication operations. As a steel producer and fabricator, Nucor generates several hazardous waste streams. Nucor is constantly seeking innovative solutions for recycling its hazardous waste streams into usable products. Unfortunately, the strict mixture and derived-from rules have frequently rendered promising technologies economically impracticable due to the high cost of process residual treatment and disposition. Nucor hopes that the Agency will use the HWIR proposal as an opportunity to address this problem.

MDF6 - Bethlehem Steel Corp., WH2P-00004, 8,1 Industry
[...] EPA should replace the mixture rule with a prohibition on sham mixing 51. A more effective approach for EPA to prevent evasion would be for the agency to prohibit facilities from sham mixing to re-classify a waste. A prohibition on sham mixing would prevent willful evasion, without sweeping an infinite variety of bona fide, low-risk mixtures into the hazardous waste system. 52. This prohibition on sham mixing would operate much like the agency's existing rules forbidding dilution as a method of complying with treatment standards. These anti-dilution rules have not created significant enforcement or compliance difficulties. 53. Similarly, EPA should replace the derived-from rule, which is closely related to the mixture rule, with new waste listings targeted to the relative handful of treatment residuals that pose actual hazards.

MDF6 - American Auto Manuf. Assn., WHWP-00194, 2, 3 Industry Assn.
Should we keep the mixture/derived-from rules? (60 FR 66348) No. As EPA states in the preamble, the original intent of the mixture and derived-from rules was to eliminate loopholes where generators could potentially dilute listed wastes by mixing them with solid wastes or performing sham treatment and thus avoid regulation. This proposal goes well beyond closing those loopholes. The mixture and derived from rules provide a circuitous approach to preventing intentional dilution which (coupled with listings based on 1970's industrial technology) has resulted in over-regulation of many wastestreams which should have never been required to be managed under Subpart C. Instead of retaining these rules, EPA should address the issue directly by moving the dilution prohibition into Part 261 so that intentional dilution could not occur. LDRs for listed wastes already inherently address the issue of sham treatment. Therefore the mixture and derived-from rules are not needed and should be removed. The dilution prohibition should be clearly aimed at the intentional dilution of wastes. Congress did not intend for EPA to regulate unintentional dilution that might occur because of the mechanics of how a waste is generated during normal production processes. We believe EPA did not originally intend to regulate accidental spills of listed wastes other than the U and P codes that always were specifically addressed by 40 CFR Part 261.33(d).

MDF6 - Safety-Kleen Corp., WHWP-00124, 3, 4 Industry
Safety-Kleen believes that the mixture and derived-from rules are no longer necessary, because they have been made obsolete by more recent regulations, including the dilution prohibition and the LDR regulations which require the application of high quality treatment. The HWIR Process Waste regulation should specifically remove the mixture and derived-from rules from the Subtitle C regulations. In addition, the Agency should make changes to the LDR program to incorporate knowledge gained from the exercise of developing the HWIR Process Waste proposal.
Safety-Kleen believes that components of the LDR regulations in the RCRA Subtitle C regulation effectively nullify the mixture and derived-from rules. The purpose of the mixture rule was to avoid situations where generators would mix a listed waste with a non-listed material and claim that the material did not meet the definition of the listing. However, when the mixture rule was promulgated, the EPA had not yet promulgated the "dilution prohibition." The dilution prohibition

(found in 40 CFR 268.3) prohibits a generator or treater from removing a characteristic from a hazardous waste simply because he had diluted that waste with some other material (unless dilution occurs as a side-result of legitimate treatment), or from removing a listing because the mixed material no longer meets the description of the listing. Furthermore, the mixture rule pre-dates the promulgation of the "Underlying Hazardous Constituent" (UHC) requirements of the LDR regulations. The UHCs prior to land disposal (the metal characteristic wastes will be incorporated into this prohibition with the Phase IV LDR regulation). The purpose of the derived-from rule was to avoid allowing a listed waste to "lose" its listing simply because minimal treatment caused it to no longer meet the original description of the listing. As discussed above regarding the mixture rule, at the time of promulgation of the derived-from rule, the EPA had not yet promulgated the dilution prohibition or the LDR regulations. The dilution prohibition, working in concert with the LDR levels, now provides adequate assurance that a listed waste will not be able to escape the RCRA system without significant and legitimate treatment. Safety-Kleen believes that the mixture and derived-from rules are no longer necessary, because the dilution prohibition and UHC provisions of the LDR rules perform the same function. Safety-Kleen also believes that certain regulations in 40 CFR 268, such as the dilution prohibition, are more far-reaching that the LDR requirements, and should be moved to a more appropriate place in the Subtitle C regulations.

MDF6 - General Electric, WHWP-00193, iii,1 Industry
[...] In the spirit of helping the Agency move the program in the right direction, GE spent some time developing an overall vision for the hazardous waste identification program that can be implemented under the current statute and is achievable over a period of five to ten years. GE's long term vision would have the Agency: - abolish the mixture and derived-from rules and replace them with a prohibition on dilution except for purposes of legitimate treatment, - expand the hazardous waste characteristics and abolish listings in a gradual fashion over time, and - promulgate constituent levels at which hazardous wastes can be managed in non-Subtitle C facilities that meet certain minimum criteria, so-called "contingent management". Initially, EPA should establish such levels for Part 258 landfills, protective surface impoundments, and Clean Air Act permitted thermal treatment units. Full implementation of this vision would greatly simplify the RCRA program, would introduce flexibility, would create strong incentives for pollution prevention, and would allow companies to focus their efforts on waste minimization rather than costly testing and analysis. The rulemakings to accomplish this vision do not have to be undertaken all at once, they can be phased-in over time. The basic ideas can also be changed as experience is gained in implementing a reformed system. Without this vision, or something like it, to guide individual reform-oriented rulemakings, however, EPA is doomed to continually repeat the mistakes of HWIR and achieve little to no progress in the foreseeable future.

MDF6 - General Electric, WHWP-00193, 2,1 Industry
[...] In summary, GE recommends the following major reforms: Abolish the mixture and derived from rules and replace them with a permanent dilution prohibition. Abolish the mixture and derived from rules. They are vestiges of a pre-HSWA, pre-Superfund, pre-LDR mentality and have outlived their usefulness and relevancy. They were originally put in place to ensure that

inappropriate mixing and sham treatment did not occur. Today, the mixture and derived from rules should be replaced with a general program-wide prohibition on dilution. EPA could simply: 1) expand the LDR prohibition to apply to circumstances beyond land management, 2) clarify that the dilution prohibition also applies to mixing of hazardous waste with non-waste materials such as media and debris, and 3) clarify that aggregation of similar wastes (e.g., high Btu organic wastes or metal bearing wastewaters) which are routinely combined for the purposes of treatment is not considered dilution. Residuals from treatment would be considered new wastestreams, subject to regulation if they failed one of the hazardous characteristics. Sham treatment and impermissible dilution would, in effect, be precluded because the LDR requirements attach at the point of generation of the waste. [...]

MDF7

MDF Wastes should be Regulated in the same way Non-hazardous Solid Wastes are Regulated (Characteristics, Supplemented by Waste-specific Listings, as Warranted)

MDF7 - Eli Lilly and Co., WHWP-00201, 2,1 Industry

The derived-from rule should be modified to allow residues from RCRA permitted TSD facilities to be evaluated against the same criteria as all other solid wastes. The Agency has requested comments on its conclusion that there is no need to change the mixture and derived-from rules. 60 Fed. Reg. 66348. Lilly suggests that the Agency reconsider this decision, particularly with regard to the derived-from rule. For the reasons set forth in detail below, Lilly strongly suggests that the Agency modify the derived-from rule to allow residues from RCRA-permitted TSD facilities to be evaluated against the same criteria as all other solid wastes. [...]

MDF7 - Eli Lilly and Co., WHWP-00201, 2,1 Industry

[...] Lilly believes that residuals from hazardous waste treatment processes should [be] evaluated in the same manner as "as generated" wastes. Clearly, the Agency's concern that generators would attempt to "minimally" process waste and claim the waste no longer meets the listing description is not applicable to permitted RCRA treatment facilities. The operation of a RCRA permitted incinerator is not "minimal" processing by any definition: it is a highly controlled, expensive technology operated to destroy hazardous wastes. There is no basis for assuming that treatment residuals (or, indeed, other mixtures or derivatives) necessarily are hazardous simply because of their heritage. If treatment residuals were evaluated fairly in accordance with the statutory and regulatory criteria for identifying hazardous waste, these wastes would be managed in a manner that poses no greater risk to human health or the environment than "as generated" wastes.3/ It is inappropriate to require facilities to make special demonstrations that the mixtures or derivatives that they produce do not meet the statutory definition of hazardous waste. Instead, such wastes should be evaluated on their own merits in the same way as other solid wastes, i.e., the treatment process should be considered as the process which "generates" the waste and evaluating the residuals against the hazardous waste characteristics and listings. This is the only manner of regulating treatment residuals which is fair and in accordance with the statutory requirements. Other federal regulatory mechanisms such as the LDR program, and the dilution prohibition, in addition to adequate state NonHazardous waste management programs, will insure that wastes which exit Subtitle C do not pose a "substantial risk" to human health or the environment. b. The lack of waste specific treatment standards is no longer a rational basis for the derived-from rule given the existence of the LDR program. The second rationale for the derived-from rule, i.e., that the Agency could not designate waste specific treatment standards, is no longer valid. The Agency has done precisely that in issuing land disposal minimum technology standards on a waste constituent basis. The Agency and the regulated community have invested untold amounts of time, effort and money in the issuance and compliance with these constituent specific treatment standards. The existence of the LDR standards creates a significantly different regulatory environment today than was present in 1980 when the derived-from rule was originally issued. If residuals from treatment of hazardous waste were not regulated under the derived-from rule as listed hazardous waste, the residuals would continue to be subject not only to the requirements for characteristic waste, but to the LDR standards. Clearly, the lack of specific treatment standards is

not a defensible basis for perpetuating the derived-from rule. [...]

MDF7 - Eli Lilly and Co., WHWP-00201, 2,1 Industry
[...] 3/ Lilly notes that in the LDR program there has been a partial attempt to recognize that a treatment process changes the so-called "treatability group" of the waste. 40 CFR 268.30(a)(4). For example, if a F001 wastewater is treated by incineration, the ash from the treatment process is in a different "treatablilty" group (i.e. non-wastewater) and the as-generated waste has met LDR requirement. Unfortunately the current derived-from rule makes this provision illusory, since the F001 listed waste code carries through the treatment process and attaches to the ash.

MDF7 - ASARCO, Inc., WHWP-00125, 3, 1 Industry
[...] The original goals of the mixture rule can be achieved with properly circumscribed and enforced controls, including the use of hazardous waste listing and identification and approaches to detect practices designed intentionally to avoid RCRA treatment requirements. Wastes derived from the treatment, storage, or disposal of listed hazardous waste, which may pose a risk to human health and the environment, similarly can be specifically addressed, rather than be covered by a generic rule. [...]

MDF7 - USWAG, WHWP-00089, 6, 6 Utility Co./Assn.
[...] Finally, contrary to EPA's claim (see 60 Fed. Reg. at 66348), no loophole in the RCRA system would result from elimination of the mixture and derived-from rules. EPA has, and always has had, lawful and adequate regulatory alternatives to protect human health and the environment. Mixture and derived-from wastes, like all other wastes generated, are subject to Subtitle C regulation if they exhibit a hazardous characteristic. Further, since 1980, EPA has also had the authority to adopt more or broader hazardous waste listings to capture distinct categories of mixture and derived-from wastes that truly warrant hazardous waste regulation (i.e., those categories that "typically and frequently" test hazardous). Thus, from the perspective of protecting human health and the environment, there is little rationale for continuing these overly broad rules. For all of the above reasons, USWAG opposes EPA's proposal to re-promulgate the mixture and derived-from rules.

MDF7 - Pacifi Corp., WHWP-00108, 5, 2 Utility Co./Assn.
[...] Finally, the elimination of the mixture and derived-from rules would not create a loophole in the RCRA system. EPA has, and always has had, lawful and adequate alternatives to protect human health and the environment. Mixture and derived-from wastes, like all other wastes generated, are subject to Subtitle C regulation if they exhibit a hazardous characteristic. Further, since 1980, EPA has also had the authority to adopt more or broader hazardous waste listings to capture distinct categories of mixture and derived-from wastes that truly warrant hazardous waste regulation (i.e., those categories that "typically and frequently" test hazardous). [...]

MDF7 - American Iron and Steel Inst., WHWP-00165, 6, 3 Industry Assn.
[...] As discussed above, EPA's actual task is far more limited (and feasible). Rather than trying to prove a negative (i.e., that a certain class of wastes is clearly not hazardous), EPA should be trying to identify a class of wastes that can be demonstrated to pose a substantial threat to human health or the environment. This class of wastes should be retained within Subtitle C, while all other wastes must be allowed to exit the system because they do not meet the statutory definition of hazardous waste. Now is the time for EPA to "fish or cut bait." If the Agency can demonstrate that a waste poses a substantial hazard, it should continue to classify the waste as a RCRA hazardous waste. On the other hand, if EPA cannot make the requisite demonstration for a solid waste, it must remove that waste from the regulatory definition of hazardous waste. EPA should not be deterred by the fact that its risk assessment tools may not be able to identify and measure every conceivable risk. The Agency's own SAB has pointed out that "risk analyses will always be imperfect tools." SAB, Reducing Risk: Setting Priorities and Strategies for Environmental Protection (Sept. 1990) at 16. Of course, the Agency should strive to correct those imperfections to the maximum extent possible. However, the quest for perfection should not prevent EPA from correcting the unlawful and extremely burdensome rules that the regulated community currently must contend with. The time for action is now.

MDF7 - American Iron and Steel Inst., WHWP-00165, 4, 3 Industry Assn.
[...] AISI believes that the best way to correct the unlawful overbreadth of the mixture and derived-from rules is to eliminate those rules entirely from the regulations, and evaluate mixtures and derivatives of listed hazardous wastes in the same way as other solid wastes. This approach is especially warranted in the case of treatment residuals because hazardous waste treatment processes are generally highly regulated (under 40 C.F.R. Parts 264, 265, and 270) and generally must meet extremely stringent standards of performance (under the land disposal restrictions program of Part 268). In addition, treatment residuals frequently bear little resemblance to the listed wastes from which they are derived. For example, ash from the incineration of organic hazardous wastes generally exists in a different physical form than the original listed wastes and contains different constituents of concern (if, indeed, they contain any). The U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) has expressed concerns about the appropriateness of the derived-from rule, stating that: the derived-from rule becomes counterintuitive as applied to processes that render wastes NonHazardous. Rather than presuming that these processes will achieve their goals, the derived-from rule assumes their failure. Shell Oil Company v EPA, 950 F.2d 741, 752 (D.C. Cir. 1991). Accordingly, there is no basis for assuming that treatment residuals (or, indeed, other mixtures or derivatives) necessarily are hazardous simply because of their heritage. It is also inappropriate to require facilities to make special demonstrations that the mixtures or derivatives that they produce do not meet the statutory definition of hazardous waste. Instead, such wastes should be evaluated on their own merits in the same way as other solid wastes (i.e., using the hazardous waste characteristics and listings). [...]

MDF7 - Cyprus Amax Minerals Company, WHWP-00099, 1,3 Industry
[...] If mixture, derived-from, or contained wastes are not generated as a result of dilution, which is used primarily to reduce the constituent levels and avoid regulation, then the wastes should be

evaluated on their own merits. Consistency of the Subtitle C regulations demands that if a waste tests below the established characteristic levels that differentiate hazardous and non-hazardous classification under RCRA, the waste simply should not be classified as hazardous, regardless of its origin. EPA's professed concern that the mixture, derived-from, or contained waste may continue to "pose a serious hazard" even though it does not exhibit a characteristic, 60 Fed. Reg. 66346, should be addressed, if addressed at all, only through appropriate revision of the characteristics. These characteristics are already the determining criteria for hazardousness with respect to the vast majority of waste volumes generated and managed under RCRA. The continuation of EPA's flawed approach in this Proposed Rule presents an anomalous situation in which a mixture, derived-from, or contained waste, which tests below the characteristic level but above the proposed exit levels, will be subject to full Subtitle C regulation. Under the same regulatory scheme, another non-mixture, derived from, or contained waste, identical in chemical and physical form to the first, is deemed by EPA to be safe enough to avoid hazardous waste regulation. This resultant scheme completely lacks intellectual or legal integrity. [...]

MDF7 - General Electric, WHWP-00193, 2,1 Industry

[...] D. GE's recommended vision for the future is a comprehensive set of hazardous characteristics to replace listings. In the spirit of helping the Agency move the RCRA program in the right direction, GE has developed a view of what we think the revised hazardous waste definition should be. Also, we present a reasonable set of reforms for EPA to implement over the next five to ten year period to achieve such a system. These reforms are derived from our wide experience managing hazardous waste, are relatively modest, and can be implemented under the current statute. They are also interdependent. That is, they need to be implemented in concert with each other, though not necessarily all at the same time, to achieve the overall goal of risk-based waste management under RCRA. GE as a corporation has made significant progress in pollution prevention and waste minimization, in spite of the regulatory barriers. We have far exceeded the goals of the 33/50 program and have made reductions in Toxic Release Inventory chemicals of 70 to 96 percent. Even more could be achieved if true regulatory reform were adopted under RCRA. The overall objective of these reforms is to simplify the waste identification system, to ensure that the level of regulatory control is commensurate with the level of risk, and to create ongoing incentives for waste minimization and pollution prevention. What follows is not a prescriptive plan because such a level of detail is best left to the Agency. Rather, GE recommends that the Agency aggressively pursue within the level of available resources and expertise, the general objectives described below so that at the end of a five to ten year period substantial actual reform will have been achieved without sacrificing overall environmental protectiveness. [...]

MDF7 - General Electric, WHWP-00193, 2,1 Industry

[...] Expand the hazardous characteristics, especially the Toxicity Characteristic, in an orderly fashion, over time, and phase out hazardous waste listings as those listings are adequately covered by the characteristics. The entry level for establishing the toxicity characteristics would represent clearly hazardous concentrations and be based on management in a land based Subtitle D unit. This is consistent with current practice. However, EPA should update the Subtitle D mismanagement scenario to reflect 15 years of progress in solid waste management. The large majority of industrial solid waste landfills meet the relevant portions of Part 258. Over time, EPA can add

additional constituents to the TCLP test. Based on EPA's current modeling efforts, there are some additional constituents which could be added quickly. EPA should first focus on adding those constituents which are the basis for existing listings (i.e., Part 261 Appendix VII constituents). As these constituents are added, EPA should remove the listings whose constituents are covered by the characteristics. This approach would also close a loophole in the current waste identification system. Some materials, which are not solid wastes at the time they become contaminated are not clearly captured today by the hazardous waste definition; for example, a process filter with a listed solvent on it and solvent placed on a rag for cleaning purposes. Also, the characteristic approach solves the sole-active ingredient limitations of the U and P listings. EPA can also develop additional characteristics as risk data and appropriate fate and transport data are obtained. For example, EPA could develop a characteristic based on an air pathway or based on ecological effects. Again, the goal of any characteristic should be to bring waste into the system that is clearly hazardous given the likely ongoing management scenario. There is no reason to bring waste into the Subtitle C system that is generally being managed safely outside of that system. [...]

MDF7 - Eli Lilly and Co., WHWP-00201, 12,2 Industry

Lilly believes that the best way to correct the unlawful overbreadth of the mixture and derived-from rules is to eliminate those rules entirely from the regulations, and evaluate mixtures and derivatives of listed hazardous wastes in the same way as other solid wastes. This approach is especially warranted in the case of treatment residuals because hazardous waste treatment processes are generally highly regulated (under 40 CFR Parts 264, 265, and 270) and generally must meet extremely stringent standards of performance (under the land disposal restrictions program of Part 268). In addition, treatment residuals frequently bear little resemblance to the listed wastes from which they are derived. For example, ash from the incineration of organic hazardous wastes generally exists in a different physical form than the original listed wastes and contains different constituents of concern (if, indeed, it contains any). If the Agency nevertheless insists on retaining the derived-from rules, it must modify the rule so as to ensure that only wastes that pose a substantial threat to human health or the environment are classified as hazardous wastes. This goal cannot be accomplished by assuming that all wastes that contain or are derived-from listed hazardous waste are hazardous unless it can be demonstrated that they contain hazardous constituents in concentrations that are "clearly not hazardous," as the Agency has proposed. See 60 Fed. Reg. 66351. Under such an approach, many derived-from wastes that are not hazardous may unlawfully be classified as hazardous wastes, simply because they contain hazardous constituents at levels that are only slightly below levels of hazardousness, rather than far below such levels or because the Agency cannot clearly demonstrate the non-hazardous nature of the wastes. Instead, the Agency must revise the regulations so that they retain within the Subtitle C regulatory scheme only those derived-from wastes that the Agency can demonstrate pose a substantial threat to human health or the environment and thereby satisfy the statutory definition of hazardous waste. This rational and lawful solution to the overbreadth of the derived-from rule can be accomplished by providing that once a listed waste has been adequately treated so as to eliminate constituent which is the basis of the listing, the waste "derived-from" the treatment of the waste no longer need be considered a hazardous waste unless it exhibits a characteristic. This would allow the residuals of treatment of hazardous waste to be rationally evaluated against the criteria the agency has already established for determining if wastes are hazardous, rather than

subjecting these wastes to the legal fiction of the derived-from rule. [...]

MDF7 - Pennzoil, WHWP-00088, 2, 3 Industry
In general, Pennzoil is disappointed that EPA adheres to the view that the mixture and derived-from rules are valid exercises of EPA's authority under the Resource Conservation and Recovery Act (RCRA). Replacing these rules with a hazardous waste determination utilizing concentration limits and physical properties based solely on risk to human health and the environment would have made the much of HWIR unnecessary.

MDF8
EPA should Implement the MDF Rules through Directives to the States

MDF8 - Heritage Environmental Services, WHWP-00017, 8,2 Waste Mgmt. Co
Heritage believes that much of what EPA hopes to accomplish with the HWIR can be readily achieved without promulgating new rules by: 1) more reasonable application of the mixture and derived-from rules, perhaps by developing explicit directives to the regions and the states, using many of the concepts in the HWIR (similar to the contained-in policy case-by-case determinations); 2) an expedited system for evaluation of delisting petitions, with an emphasis on upfront delistings; and 3) issuing site-specific treatability variances to non-superfund remediation projects with the same speed and criteria as is used for Superfund Guidance 6A and 6B. At a minimum, Heritage especially encourages EPA to develop criteria for the consistent and reasonable implementation of the delisting program by the regions.

MDF9 - ASARCO, WHWP-00125, 2,3 Industry
Asarco appreciates the efforts EPA has devoted to the HWIR rulemaking. However, after 16 years of experience with RCRA, the Agency still has not adequately justified the need for retaining the mixture and derived-from rules. While the proposed HWIR may be intended to address shortcomings inherent in the mixture and derived-from rules and in the listing process, EPA should address the fundamental issue of whether these rules are justified in the first place.
Despite this critical shortcoming, Asarco supports the Agency's efforts to include risk-based decision-making in the RCRA regulatory process, although there are a number of concerns with the proposed rule. [...] EPA lacks the statutory authority to regulate wastes that do not pose an actual risk to human health or the environment.

MDF9 - ASARCO, WHWP-00125, 3,1 Industry
[...] To justify its rationale for the mixture and derived-from rules, EPA has relied on unreasonably conservative assumptions in the proposed HWIR. These assumptions produce exit levels that will result in continued regulation of many wastes that do not pose a significant hazard to human health and the environment. By using more reasonable assumptions in the HWIR risk assessment, EPA might well have demonstrated that the mixture and derived-from rules are largely regulating nonhazardous wastes and are therefore not authorized and unnecessary under RCRA. EPA's lack of legal authority notwithstanding, the mixture and derived-from rules are not good public policy, especially given EPA's overly conservative implementation of HWIR risk assessment. [...]

MDF9 - Air Products and Chemicals, WHWP-00148, 6,4 Industry
[...] The fact that the proposed HWIR contains exit levels for leaving the hazardous waste regulatory system does not grant the Agency the authority to make an overbroad classification of hazardousness. First, under terms of the proposal, wastes will still be considered hazardous before they can exit from the hazardous waste regulatory system. Second, the Agency's excessively low exit levels, such as for methanol in a nonwastewater leachate form, will, as a practical matter, provide little or no opportunity for wastes to exit the system. The exit levels therefore do not truly correct the overbroad classification. Many mixture and derived-from wastes will continue to be classified as hazardous even though they do not pose a "substantial" hazard. [...]

MDF9 - Kaiser Alumin. & Chemicals Corp., WHWP-00149, 5,1 Industry
[...] The fact that the proposed HWIR contains exit levels for leaving the hazardous waste regulatory system does not grant the Agency the authority to make an overbroad classification of hazardousness. First, under terms of the proposal, wastes will still be considered hazardous before they can exit from the hazardous waste regulatory system. Second, the Agency's excessively low exit levels, such as for cyanide, will, as a practical matter, provide little or no opportunity for wastes to exit the system. The exit levels therefore do not truly correct the overbroad classification. Many mixture and derived-from wastes will continue to be classified as hazardous

even though they do not pose a "substantial" hazard.

MDF9 - CMA Water Additives Panel, WHWP-00074, 4,3 Industry Assn.
[...] The fact that the proposed HWIR contains exit levels does not grant the Agency the authority to make an overboard classification of hazardousness. First, under terms of the proposal, wastes will still be considered hazardous before they can exit from the hazardous waste regulatory system. Second, the Agency's excessively low exit levels, such as for acrylamide, will, as a practical matter, provide little or no opportunity for wastes to exit the system. The exit levels therefore do not truly correct the overbroad classification. Many mixture and derived-from wastes will continue to be classified as hazardous when they do not pose a "substantial" hazard. [...]

MDF9 - Holnam, Inc. WHWP-00150, 10,3 Waste Mgmt. Co.
Because of the uncertain future of the regulatory status of CKD, Holnam is providing these comments on the mixture and derived-from rules, 40 C.F.R. Sections 261.3 (a) (2) (iv), 261.3 (c) (2) (i), which are being reproposed in the HWIR proposal. 60 Fed. Reg. 66,344, 66,440. Holnam continues to question the legality of these rules. The mixture and derived-from rules will continue to apply to wastes that will not be able to exit the Subtitle C regulatory system via the HWIR. While EPA claims that the proposed HWIR will "reduce any overregulation of low-risk wastes captured by the mixture and derived-from rules," 60 Fed. Reg. at 66,346, many wastes, such as those containing chromium, arsenic, or beryllium, will not be able to exit the system. As a result, many wastes that do not pose substantial, if any, risk to human health and the environment will continue to be unnecessarily subject to regulation as a hazardous waste.

MDF9- Holnam, Inc. WHWP-00150, 11,1 Waste Mgmt. Co.
[...] The fact that the proposed HWIR contains exit levels for leaving the hazardous waste regulatory system does not grant the Agency the authority to make an overbroad classification of hazardousness. First, under terms of the proposal, wastes will still be considered hazardous before they can exit from the hazardous waste regulatory system. Second, the Agency's excessively low exit levels, such as for chromium, arsenic, or beryllium will, as a practical matter, provide little or no opportunity for wastes to exit the system. The exit levels therefore do not truly correct the overbroad classification. Many mixture and derived-from wastes will continue to be classified as hazardous even though they do not pose a "substantial" hazard.

MDF9 - Hercules, Inc. WHWP-00172, 41,1 Industry
[...] The fact that the proposed HWIR contains exit levels for leaving the hazardous waste regulatory system does not grant the Agency the authority to make an overbroad classification of hazardousness. First, under terms of the proposal, wastes will still be considered hazardous before they can exit from the hazardous waste regulatory system. Second, the Agency's excessively low exit levels, such as for toxaphene, will, as a practical matter, provide little or no opportunity for wastes to exit the system. The exit levels therefore do not truly correct the overbroad classification. Many mixture and derived-from wastes will continue to be classified as hazardous

even though they do not pose a "substantial" hazard.

MDF9 - Acrylonitrile Group, Inc., WHWP-00145, 2,5 Industry Assn.
[...] The fact that the proposed HWIR contains exit levels for leaving the hazardous waste regulatory system does not grant the Agency the authority to make an overbroad classification of hazardousness. First, under terms of the proposal, wastes will still be considered hazardous before they can exit from the hazardous waste regulatory system. Second, the Agency's excessively low exit levels, such as for acrylonitrile, will, as a practical matter, provide little or no opportunity for wastes to exit the system. The exit levels therefore do not truly correct the overbroad classification. Many mixture and derived-from wastes will continue to be classified as hazardous even through they do not pose a "substantial" hazard. [...]

MDF9 - API, WHWP-00106, 12,2 Industry Assn.
[...] EPA justifies the validity of today's proposed rules by asserting that members of the mixture and derived-from class that pose low risks will be eligible for exemption under the HWIR proposal. Thus, EPA believes that such wastes remain within the scope of the rules and pose threats warranting regulation. API vigorously disagrees with EPA's conclusion. The proposed HWIR rule provides little opportunity for waste streams to exit Subtitle C under the proposed HWIR due to the conservative assumptions underlying the proposal and the flawed multipathway analysis. Since, as discussed above, the mixture and derived-from rules subject wastes which pose little risk to human health and the environment to Subtitle C and virtually no oil industry wastes exit Subtitle C under HWIR, all of concerns that API had with the original rules remain a concern under the HWIR proposal to modify the mixture and derived-from rule. 1/ EPA has also admitted that the rules "have resulted in unnecessarily stringent requirements for certain low risk wastes," 57 Fed. Reg. 21454, and that the purpose of the HWIR proposal was to address "over-regulatory situations created by the 'mixture' and 'derived-from' rules." Id at 21452.

MDF9 - SOCMA, WHWP-00138, 3,1 Industry Assn.
The proposed rule was meant to resolve the problem of over-inclusive regulation of materials as "hazardous wastes" under the so-called "mixture" and "derived-from" rules. 40 C.F.R. Section 261.3(a)(2)(iv), 261.3(c)(2). EPA has failed in two regards: (1) the mixture and derived-from rules are not altered by this proposal; and (2) the proposal provides no significant relief from their effect. The HWIR proposal does not accomplish the goal of exempting wastes improperly caught in the hazardous waste regime because the proposed exit levels are overly conservative. A. The Proposed Exit Levels Fail To Provide Relief From the Mixture and Derived-From Rules The mixture rule provides that mixtures of solid wastes and listed hazardous wastes are classified as "hazardous" wastes. 40 C.F.R. Section 261.3(a)(2)(iv). The derived-from rule provides that any solid waste "generated from the treatment, storage or disposal of a hazardous waste" is a hazardous waste. 40 C.F.R. Section 261.3(c)(2). These rules were added to the final RCRA hazardous waste rules without the opportunity for notice and comment and were vacated and remanded to the Agency. Shell Oil Co. v. EPA, 950 F.2d 741, 765 (D.C. Cir. 1991). In this proposal, EPA notes that: "However, EPA acknowledges that the mixture and derived-from rules

apply regardless of the concentrations and mobilities of hazardous constituents in the waste. [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. at 66346)]." The proposed rule fails to fulfill its purpose for several reasons. [First,] the proposed exit levels are simply so conservative that they fail to provide meaningful regulatory relief. The proposed exit levels continue to regulate solid wastes that "pose very low risk to human health and the environment." Second, the implementation scheme contained in the proposed rule is so complex, expensive, inflexible and unrealistic that few, if any, SOCMA members will be able to take advantage of the HWIR exemptions. [As] such, SOCMA believes that the proposed exit levels fail to provide meaningful regulatory relief to most small businesses and batch processors. Finally, the requirement that LDR treatment standards be met for most wastes under the proposal keeps the kinds of wastes that EPA intended to exempt from the universe of RCRA regulation within the RCRA regulatory scheme. Thus, the HWIR proposal does not fulfill EPA's express purpose of providing regulatory relief from the overly-broad mixture and derived-from rules. [...]

MDF9 - National Coil Coaters Assn., WHWP-00192, 6,1 Industry Assn.
[...] Accordingly, NCCA supports the stated purpose of the HWIR rule to remedy the substantive overbreadth of the mixture and derived-from rules. See 57 Fed. Reg. at 21,452; 60 Fed. Reg. at 66,346-47. 2. EPA Must Also Provide Relief from Overbroad Listings NCCA also supports EPA's decision to address not only the overbreadth of the mixture and derived-from rules, but of the underlying hazardous waste listings as well by making HWIR's risk-based exit equally available to mixtures, treatment residuals, and the listed wastes themselves. 60 Fed. Reg. at 66,347. This approach is necessary because if EPA were to provide a risk-based exit for mixtures and treatment residuals from listed wastes, but not for the non-mixed or non-treated listed wastes that underlie them, there would be a great discrepancy in the hazardous waste identification system. In addition, this approach is required by law. The automatic application of the hazardous waste listings inappropriately brings into the hazardous waste regulatory system, and keeps in that system, low risk wastes that should not and lawfully cannot be regulated as hazardous.3 /Moreover, provision of a risk-based exit from the hazardous waste listings makes sense. EPA promulgated the bulk of its hazardous waste listings in 1980, id. at 66,346, with limited information on many of the wastes it listed. Since then, manufacturing processes, raw materials used in them, resulting waste streams and scientific and regulatory understanding of the risks posed by various wastes have changed considerably. In light of these changes, in some cases wastes covered by the listings simply are not hazardous. In other cases, the automatic application of the hazardous waste listings, as with the automatic application of the mixture and derived-from rules, and attendant Subtitle C duties serve as a disincentive for facilities to take advantage of different raw materials or to alter their processes to reduce the use of hazardous constituents and generation of truly "hazardous" waste. If all the waste meeting a broad listing description will be deemed hazardous and have to be regulated as such regardless of its own characteristics, why should a facility invest in changes that will make no regulatory difference, particularly where such changes may have at least some adverse cost and product quality consequences. Provision of an appropriate risk-based exit will address these disincentives. [...]

MDF9 - Capital Returns, WHWP-00160, 3, 2 Other
[...] Accordingly, Capital Returns and Abbott support the stated purpose of the HWIR rule to remedy the substantive overbreadth of the mixture and derived-from rules. See, e.g., 57 Fed. Reg. at 21,452; 60 Fed. Reg. at 66,346-47. [...]

MDF9 - Beazer East, WHWP-00196, 4,1 Waste Mgmt Co
[...] Second, the Proposed Rule provides little relief from the unfairness of the Mixture and Derived-From Rules because the Proposed Rule will allow exit of virtually no listed mixtures and/or "derived-from" wastes. [EPA's] underlying assumption is invalid because EPA has created exit levels which are too stringent to provide relief to the regulated community and implementation requirements which are too costly in many cases with which to comply. Thus, many regulated entities will continue to generate wastes which are mixtures or which are derived-from the treatment of hazardous wastes which pose no substantial present or potential hazard to human health and the environment, but are characterized as hazardous by default. [...]

MDF9 - SOCMA, WH2P-00035, 1,3 Industry Assn.
[...] SOCMA's members awaited the new HWIR Proposal with great interest and an expectation that it would finally offer them some real, substantive relief from the over-regulation of low-risk wastes caused by the mixture and derived-from rules. SOCMA supports EPA's effort to revise the mixture and derived from rule and develop a new risk assessment model to set chemical specific exit levels for listed hazardous waste. [...]

MDF9- Capital Returns, WHWP-00160, 5, 2 Other
Capital Returns and Abbott also support EPA's decision to address not only the overbreadth of the mixture and derived-from rules, but of the underlying hazardous waste listings as well by making HWIR's risk-based exit equally available to mixtures, treatment residuals, and listed wastes themselves. 60 Fed. Reg. at 66,347. This approach is necessary because if EPA were to provide a risk-based exit for mixtures and treatment residuals from listed wastes, but not for the non-mixed or non-treated listed wastes that underlie them, there would be a great discrepancy in the hazardous waste identification system. In addition, this approach is required by law. The automatic application of the hazardous waste listings inappropriately brings into the hazardous waste regulatory system, and keeps in that system, low risk wastes that should not and lawfully cannot be regulated as hazardous. Moreover, provision of a risk-based exit from the hazardous waste listings makes sense. EPA promulgated the bulk of its hazardous waste listings in 1980, id. at 66,346, with limited information on many of the wastes it listed. Since then, manufacturing processes, raw materials used in them, resulting waste streams and scientific and regulatory understanding of the risks posed by various wastes have changed considerably. In light of these changes, in some cases wastes covered by the listings simply are not hazardous. [...]

MDF9 - Merck & Co., WHWP-00173, 1,2 Industry
[...] This rule maintains the MDF rules "as is" and creates exit criteria that are very difficult to

achieve and has issues associated with implementation that could easily render this rule useless. Merck urges EPA to carefully consider these comments and comments submitted by others, such as industry trade associations, to modify this proposal into a final rule that achieves true relief from the Subtitle C system. This is the second time that EPA has attempted this rulemaking and it would be unfortunate if the end result were to provide no relief.

MDF9 - USWAG, WHWP-00089, 72,1 Utility Co./Assn.
Although USWAG does not support the re-promulgation of mixture and derived-from rules we agree with the fundamental approach of the HWIR proposal: the establishment of a self-implementing risk-based floor by which listed hazardous wastes can exit Subtitle C. In particular, USWAG believes that contingent management should play an integral role in the HWIR process. [...]

MDF9 - GPU Nuclear Corp, WHWP-00208, 1,2 Utility Co./Assn.
Despite our objection to the continuation of the mixture and derived-from rules, GPUN generally supports EPA's approach in the HWIR process waste proposal to establish a self-implementing risk-based "floor" by which listed hazardous wastes can exit the regulatory system if the wastes do not exhibit a hazardous characteristic. This process if properly enacted will encourage pollution prevention, create incentives for waste minimization and the development of innovative waste treatment technologies, and reduce unnecessary demand for treatment and disposal.

MDF9 & OTH7- JCP&L, WHWP-00220, 3,4 Utility Co./Assn.
Notwithstanding our opposition to the continuation of the mixture and derived-from rules, JCP&L supports EPA's general approach of establishing a self-implementing risk-based "floor" by which listed hazardous wastes can exit RCRA's "cradle to grave" regulatory system. JCP&L is particularly supportive of the expanded use of contingent management exclusions in the RCRA program.[...]

MDF9 - GPU, WHWP-00239, 3,6 Utility Co./Assn.
Notwithstanding our opposition to the continuation of the mixture and derived-from rules, GPU Companies support EPA's general approach of establishing a self-implementing, risk-based "floor" by which listed hazardous wastes can exit RCRA's "cradle to grave" regulatory system. [...]

MDF9 - Cyprus Amax Minerals Company, WHWP-00099, 1,3 Industry
[...] The proposed HWIR's exit mechanism merely legitimizes the initial and fundamental error of unjustifiably and automatically deeming mixture and derived-from wastes to be hazardous wastes. In fact, the Proposed Rule compounds this error further by: (1) allowing the waste to exit from RCRA Subtitle C regulation only if it meets levels far below those which would characterize it as a hazardous waste in the first place; and (2) requiring satisfaction of exit levels for constituents

totally unrelated to the listed waste which purportedly, originally caused the waste to be classified as hazardous waste, again at levels far below those which would classify it as a hazardous waste if evaluated independently. Thus, EPA's arbitrary and capricious and "form over substance" approach continues. [...]

MDF9 - Cyprus Amax Minerals Company, WHWP-00099, 1, 3 Industry
[...] While HWIR might serve to minimally decrease the burden imposed by the otherwise inflexible mixture and derived-from rules, the continued application of these regulations to low-risk wastes not benefitted by the HWIR exit levels is unreasonable. In fact, the D.C. Circuit in Shell Oil recognized in 1991 that the derived-from rule may ignore important technological advances, stating that the rule "becomes counterintuitive as applied to processes designed to render wastes nonhazardous. Rather than presuming that these processes will achieve their goals, the derived-from rule assumes their failure." Shell Oil, 950 F.2d at 752. Furthermore, contrary to EPA's assertions, the fact that HWIR may allow a very small portion of the broad universe of low-risk wastes to exit the RCRA Subtitle C system does not create a "better basis for believing that wastes which remain within the scope of the mixture and derived-from rules pose threats warranting regulation." 60 Fed. Reg. 66348. The Agency offers no evidence to support the broad-based and arbitrary assumption that all wastes containing constituents at levels exceeding the HWIR exit levels pose a threat to human health and the environment. Instead of making such unfounded blanket determinations, EPA must carefully reevaluate the mixture and derived-from rules and develop a less conservative structure for allowing more low-risk wastes to exit the RCRA Subtitle C system.

MDF9 - IPC, WHWP-00083, 2,1 Industry Assn.
[...] The proposed HWIR is designed to allow low-risk wastes to "exit" the Subtitle C hazardous waste management system as long as waste generators certify that their wastes meet EPA-proposed "exit levels" for a set number of constituents and comply with all testing, notification, and recordkeeping requirements. Unfortunately, it is IPC's position that the proposed HWIR is unlikely to provide generators with the regulatory relief which they seek.2/ The EPA-proposed exit levels, which were derived using an untested and very conservative "multi-pathway" risk assessment model, are so stringent that it is unlikely that many wastestreams would be able to exit Subtitle C. It is expected that only the most dilute wastewaters would be capable of exiting under the proposed exit levels. For IPC members, the proposed exit levels include copper and nickel, which would likely result in the exclusion of PWB process sludge (F006) from possible exemption since those constituents are present in fairly high quantities in F006 (which is the reason F006 is such a great candidate for metals reclamation). Also, the proposed rule would require nonwastewaters (i.e., F006 sludge) to meet both totals as well as leach numbers for each listed constituent contained in the waste. According to IPC member data, this requirement is virtually impossible to meet for a number of F006 sludge constituents, such as chromium, nickel, lead, silver, antimony, and zinc. IPC members are also concerned that this requirement would discourage pollution prevention and recycling by encouraging facilities to add benign substances to their wastes, which may render them unrecyclable, in order to meet proposed HWIR exit levels. 1/ EPA has Subtitle C regulatory authority over hazardous wastes. "Hazardous waste" is defined in the Solid Waste

Disposal Act (which was later amended by RCRA) as "a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may - (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) 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 USCA Section 6903(5). 2/ According to a number of IPC members, "the proposed HWIR is more trouble than it is worth." One member wrote, "[t]he time and added expense combined with liability concerns for any remaining toxicity characteristics will not allow us to use the HWIR."

MDF9 - General Electric Co., WHWP-00193, 2,1 Industry
[...] The mixture and derived-from rules are the source of much of the over-regulation in the RCRA program and steps taken to address the problems caused by these rules in the short term can serve as a starting point for a longer term reform effort. This requires EPA to step back from its day-to-day responsibilities and focus some attention on where the hazardous waste identification program should be in five to ten years and how to get there, through both regulatory and non-regulatory changes. GE fears that EPA has not yet undertaken this critically important activity. GE has come to this conclusion for several reasons: - this second HWIR proposal does not offer real regulatory reform but instead serves only to perpetuate the over-regulation of substantial amounts of waste; - the proposal is based on significantly flawed and overly conservative modeling and an abundance of regulatory hurdles that must be overcome to qualify, resulting in very few wastes being able to exit the system; - the unwillingness to rationalize all of the Land Disposal Restrictions regulatory levels with the waste identification program will add to the number of regulatory levels in the overall program, introducing yet another level of complexity to an already overly complex regulatory regime; - the unwillingness to accept that the last 15 years have witnessed real progress in waste management severely limits the conditional management proposal; - the draconian enforcement policy virtually guarantees that no commercial Subtitle D facility will accept waste that has exited under HWIR; and - the classification of the rule as a "less stringent" RCRA rule will perpetuate the increasingly complex patchwork quilt of state regulatory programs. This HWIR proposal does not set the Agency on a path toward a more rational, risk-based RCRA program, but instead toward a program of increasing complexity and inappropriate regulation. In fact, if this rule is finalized as conceived, it would actually be counter-productive. GE believes that the precedent that would be set by such a conservative rule and such technically flawed exit levels would never be overcome and that the program would be burdened by them long into the future. Moreover, the complexity of RCRA implementation would expand exponentially. [...]

MDF9 & HWIR - CMA, WHWP-00073, 11,2 Industry Assn.
[...] As is, the rule does not provide credible exit levels or significant relief from the existing mixture and derived-from rules. Comparison of Proposed Exit Levels with Naturally Occurring Levels in Food and Other Products While household wastes are excluded from RCRA, the public properly perceives food to be "nonhazardous" under any common sense definition of the word. As a general reality check on the proposal's exit levels, therefore, foods eaten on a routine basis by

the general population cannot be considered hazardous and should readily "pass" the HWIR exit criteria. The same is true for many nonfood products used routinely in our society. Yet, as the following text demonstrates, the conservatism of the exit levels results in such items failing to meet the qualifications for an exit. Foods Our limited research conducted to determine constituent levels in food has been one of the most enlightening in terms of illuminating the EPA methodology. As Table 9 shows, many common foods would fail to qualify for an exit if subjected to the exit criteria. As an example, picture a lunch composed of the following foods: tuna sandwich, made of toasted bread, tuna, lettuce and tomato; carrot sticks; banana; and hot tea or cocoa. [Note: See a hardcopy of Comment WHWP-00073 to review Table 9 (a 2-page table).] None of this lunch would qualify as "nonhazardous" under this proposed HWIR. Now picture the following evening meal (preceded by an alcoholic beverage containing rum): lamb chop; potatoes; corn on the cob; sauted mushrooms; deviled eggs; and coffee. Again, every item on the dinner menu would be too hazardous to exit under HWIR. If ordinary foods cannot meet the exit criteria under this rule, then there is little chance that low-risk industrial wastestreams captured by the mixture or derived-from rules and currently managed as hazardous at high costs to the generating facility, can qualify. [...]

HWIR & MDF9- American Industrial Health Council WHWP-00100, 38,1 Industry Assn.
A "reality check" comparison of proposed exit levels with other constituent levels underscores concerns about the validity and utility of the HWIR proposal. The proposed exit levels were compared to a number of regulatory and nonregulatory constituent levels as a means to further assess the reasonableness of these exit levels. These "reality checks" confirm AIHC's belief that the Agency's methodology is significantly flawed, that the proposed exit levels are much too conservative, and that many common, nonhazardous substances would not qualify as exempt under the HWIR Proposal. AIHC encourages EPA to revisit the assumptions used throughout its analysis, use more realistic management scenarios and only conduct an analysis for well-understood pathways that impact the resulting exit levels. As it stands, the HWIR Proposal does not provide credible exit levels or significant relief from the existing mixture and derived-from rules. As evidence of this point, AIHC offers the work product of one of its members, Eastman Chemical Company, which has also been shared with others in the regulated community (Tables 1-9). The following comparisons between the proposed exit levels and existing EPA regulatory levels from other programs shows that the proposed levels are significantly flawed.

HWIR & MDF9 - Eastman Chemical, WHWP-00162, 12,4 Industry
Eastman compared EPA's proposed exit levels to a number of benchmarks, to assist in determining the reasonableness of the exit levels. Such "reality checks" confirm our belief that the Agency's methodology is significantly flawed, that exit levels are much too conservative and that many common, nonhazardous substances would not qualify as nonhazardous under the proposed rule. EPA must revisit the assumptions used throughout its analysis, use more realistic management scenarios and revise the HWIR exit levels upward for many constituents if this rule is to truly identify waste that can appropriately be managed as nonhazardous waste. As is, the rule does not provide credible exit levels or significant relief from the existing mixture and derived from rules. Comparison of POTW influent wastewaters to EPA's national generic exit levels EPA's national generic exit levels for wastewaters were compared to the maximum concentration levels of

constituents in POTW influent wastewaters, based on a 40-POTW study (reported in EPA's Fate of Priority Pollutants in Publicly Owned Treatment Works, Final Report, Volume 1, EPA 440/1-82/303, September 1982 and summarized in Municipal Sewage Sludge Management, Processing, Utilization and Disposal, Chapter 3, "Chemical Constituents Present in Municipal Sewage Sludge," 1992). The comparison is tabulated in Table 1 of these comments. Maximum concentration levels of the POTW constituents were chosen for this analysis, because generators determining whether or not a given stream is eligible for an exit under this proposed rule will want to ensure that the exit level for each constituent is comfortably higher than the maximum level detected for that constituent. Just meeting the exit level will not be sufficient--generators cannot allow a given stream to qualify for an exit one day and then fail another day. Thus, the highest observed constituent levels must be comfortably below corresponding exit levels before generators will seek to implement an exit. As Table 1 demonstrates, a little more than half of the 88 POTW constituent levels for which there are also exit levels (45/88 or 51%) exceed the proposed exit levels. This means that many, if not most, POTW nonhazardous influent wastewaters would contain one or more constituents above the respective exit levels so, if subjected to the HWIR standards, would be considered too "hazardous" to qualify for an exit. Industrial influent wastewaters should not be held to a higher standard than POTW influent wastewaters. 2. Comparison of POTW effluent wastewaters to EPA's national generic exit levels Eastman also compared the maximum concentration levels of constituents in effluent wastewaters, i.e., the treated wastewaters, from the 40 POTWs to EPA's national generic exit levels for wastewaters (Table 2). Again, the data confirm the unreasonableness of EPA's exit criteria. About 42 percent of the constituents detected in treated POTW effluent streams (36/85) exceed the exit levels EPA has proposed for wastewaters. Existing nonhazardous wastewater streams should be able to easily pass EPA's criteria for exit. Clearly, both influent and effluent wastewaters from many POTWs would fail to exit the universe of hazardous waste, if subject to the HWIR criteria. This demonstrates the failure of the model to generate risk-based numbers that correlate closely to an actual risk. 3. Comparison of metals levels in municipal sewage sludge to EPA's national generic exit levels The median concentrations of seven metals in U.S. municipal sludges that had been dried were compared to EPA's national generic exit levels for metals in nonwastewaters (Table 3). Maximum concentration data were not available. The U.S. municipal sludge concentrations were based on three studies: the 40-POTW survey previously referenced, an Association of Municipal Sewerage Agencies (AMSA) study that looked at data from 59 member companies, and a Mumma survey that looked at sludge quality from 23 US. cities (Mumma, R.O., et al., 1984, "National Survey of Elements and Other Constituents in Municipal Sewage Sludges," Archives Environmental Contamination and Toxicology, 13:75). Four metal levels--chromium, copper, mercury and zinc--exceeded EPA's generic exit levels in all three studies. Chromium in municipal sludges on a dried basis ranged from a median of 222 ppm to 1,275 ppm, compared to EPA's exit level of 10 ppm. Median levels of copper ranged from 411 ppm to 991 ppm in municipal sludges, compared to an EPA exit level of 6 ppm. Mercury median levels ranged from 1.7 to 4.8 ppm in municipal sludges, compared to EPA's exit level of 0.6 ppm. And median levels of zinc ranged from 980 to 1,813, compared to EPA's exit level of 320 ppm. Two other metal levels--cadmium and nickel--were found to significantly exceed EPA's generic exit levels in the Mumma survey. Only the constituent levels for lead were lower across the board than the EPA exit levels. This comparison clearly demonstrates that the EPA exit levels for metals in nonwastewaters are absurdly low. Levels found in municipal sludges are much higher than the exit levels, yet those

sludges are managed as nonhazardous waste. Further, in every instance, the median metals levels in the nonhazardous municipal sludge were higher than the levels of metals in Eastman's derived from, "hazardous" wastewater treatment sludge. Yet Eastman's sludge must continue to be managed as hazardous because it, too, cannot meet all relevant metals exit levels (fails two). 4. Comparison of metals levels in sewage sludge or domestic septage that can be applied to the land for beneficial use or disposal with EPA exit levels for nonwastewaters 40 CFR Part 503 contains "Standards for the Use or Disposal of Sewage Sludge." Table I of Section 503.13 contains "ceiling concentrations" for 10 metals. These ceiling concentrations are levels below which bulk sewage sludge or sewage sludge sold or given away in a bag or other container can be applied to the land. Those ceiling concentrations are shown in Table 4 of this document, along with EPA's nonwastewater exit levels. The ceiling concentrations of all 10 metals are much higher than their corresponding HWIR exit levels for metals. Thus, municipal sewage sludge that can legally be applied to the land for beneficial use or disposal would not qualify for an exit under HWIR. In addition, bulk sewage sludge applied to a lawn or home garden, or bagged or containerized sewage sludge sold or given away for land application, is subject to monthly average concentration limits (Table 3 of Section 503.13). These monthly average concentrations are also compared to EPA's exit levels for metals in nonwastewaters (Table 5 of this document). With the exception of lead, the monthly average concentrations allowable for sewage sludge are significantly higher than the HWIR exit levels applicable to industrial wastewater treatment sludges. If EPA, in former rulemakings, has determined that the land application of sewage sludges with the levels of metals as shown in Tables 4 and 5 are protective of human health and the environment, then one has to assume there are defects in the EPA methodology that generated the HWIR exit levels. There clearly is a regulatory conflict between 40 CFR Part 503 and the proposed rule. 5. Comparison of nonwastewater exit levels for metals with RCRA delisting levels EPA has, in the past, delisted wastestreams under the provisions of 40 CFR Part 260.22. Those provisions allow a generator to petition the Agency to amend Part 261 to exclude a waste produced at a particular facility. Appendix IX to Part 261 lists the delisted wastestreams and for applicable wastestreams, shows the allowable constituent levels that must not be exceeded in order to maintain the delisting. A benchmark analysis was done to compare the delisting levels for metals in nonwastewaters excluded from non-specific sources to the HWIR metals exit levels for nonwastewaters (Table 6). The delisting values in Table 6 represent the range of delisting levels for each metal across numerous delisted streams, as well as the mean delisting value for each metal. The analysis shows that EPA's HWIR exit levels are significantly lower than delisting levels for 8 of 10 metals. The delisting levels are based on site-specific data, and this analysis provides a good demonstration that higher exit levels could be gained, if the Agency promulgates Conditional Exemption Option 5. 6. Comparison of metals levels in soil with EPA's national generic exit levels for metals Metals occur naturally in soil, with Table 7 summarizing the average and maximum levels found in Eastern and Western US. soils. Logic would dictate that wastes containing levels of metals at or below background levels in soil could not possibly be considered a threat to human health and the environment. Further, there's no reason to assume that only background levels in soil are "safe" levels; it's very possible that metals could be in soils at higher than background levels and still pose no significant concern. When comparing the nonwastewater exit levels of 16 metals with corresponding mean and maximum soil concentrations (no information on background levels was found for cadmium or silver), one finds that the exit levels are lower than naturally occurring levels for 12 of the 16 metals. Under the HWIR rule, as

proposed, only one constituent has to fail at any given point in time for the entire stream to be considered ineligible for an exit. Thus, most of the soil across the United States would fail to qualify for an exit under the proposed rule, because the naturally occurring level of one or more metals would very likely exceed EPA's exit levels. This is yet another indicator that the methodology used by the Agency in setting risk-based exit levels for metals is flawed. Common soils should easily "pass" EPA's exit criteria. Eastman does not support using average soil concentrations or some percentile of those average concentrations as exit levels for metals, as suggested by the Agency in the preamble to the rule. That is an inappropriate, non-risk-based "fix" outside the Agency's methodology. There are many nonmetal exit levels that also need "fixed." It is our strong opinion that EPA needs to review its methodology and assumptions and correct existing problems in its methodology so that credible risk-based exit levels are generated, for both metals and nonmetals.

MDF9 - Eastman Kodak, WHWP-00065, 1,1 Industry
[...] Kodak is pleased that the Agency is attempting to establish a risk-based exit mechanism other than the current impractical delisting program. A generic delisting program which is largely self-implementing, like that proposed in the Hazardous Waste Identification Rule (HWIR), will break new ground toward reforming the RCRA regulatory system. It will also begin to make RCRA a more rational system. In addition, it will give waste generators targets for their pollution prevention programs which don't exist under the current "mixture an derived-from rules". We believe that, on a national basis, only minuscule amounts of hazardous waste will be able to use the HWIR exemption. This will not be responsive to the desires to "fix" the current system, and will result in an exemption process which only exist on paper in 40 CFR Part 261.

MDF9 - Eastman Chemical Co., WHWP-00162, 8,1 Industry
[...] Thus, the need for relief from over-protective mixture/derived from rules is real, and the HWIR process affords the Agency an opportunity to correct the situation. Work could be conducted to actually reduce/remove constituents that can be significantly harmful, thus allowing some of these high-volume, low-toxicity streams (wastewaters or resulting sludges) to exit from the system. This is the type of waste minimization that should be encouraged by HWIR and not the artificial waste minimization described above. However, this will not occur if the exit levels remain unrealistically and impractically low. This proposal demonstrates that the EPA has used a flawed methodology that does little to remedy the existing situation. Few wastestreams will meet the resulting conservative exit levels qualifying them for an exit from the universe of hazardous wastes. Even the proposed contingent management option is associated with numbers so conservative that many deserving streams will fail to exit. Such streams as do qualify may well be too small to justify the costs of implementation. For some years now, the Agency has been under various court- and Congressional-mandated orders to revise the mixture and derived from rules. It is very difficult for Eastman to accept that after years of effort and major expenditures by the Agency (and by industry), we're no closer to a "fix" now than we were years ago. If a final rule is promulgated under the current methodology, the Agency is almost certain to face a continuation of legal challenges. Consequently, it's obvious that a significant amount of additional time and financial resources (taxpayer-provided funds) would be required to revise the existing methodology.

MDF9- UIC Task Group, WHWP-00078, 3,7 Industry Assn.
[...] EPA has proposed this rulemaking to reduce the overregulation of low-risk wastes captured by the mixture and derived-from rules. This rulemaking is intended to address listed hazardous wastes, mixtures of listed hazardous wastes and solid wastes, and residues derived-from managing listed hazardous waste that, under current rules, continue to be designated as "hazardous waste" although they are either generated with constituent concentrations that pose low risks or treated in a manner that reduces constituent concentrations to low levels of risk. The UIC Group supports establishing concentrations that identify when a waste can be managed in a non-Subtitle C facility.

MDF9 - Electronic Industries Assn., WHWP-00114, 1,1 Industry Assn.
EIA supports the basic intent of the HWIR. The concept of the HWIR could, in theory, eliminate unnecessary regulatory burdens associated with wastes that are low risk and that are managed in an appropriate manner. EIA embraces the concept embodied in the HWIR, and we congratulate the Agency for its effort to try to implement common sense, risk-based reforms to the hazardous waste regulatory system. As the Agency is aware, in many circumstances the current hazardous waste regulations are divorced from reality, in which wastes are subject to rigorous regulatory requirements simply because of the manner in which they were generated, regardless of the risk the waste may pose to human health or the environment. We believe that the RCRA program needs to consider risk in determining whether a waste should be managed as a hazardous waste, and should reduce the over-regulation of some wastes that occur as a result of the "mixture" and "derived-from" rules. As a result of the mechanical application of these rules, the "mixture" and "derived-from" rules unnecessarily increase the volume of wastes that must be managed as hazardous, and inhibit beneficial recycling of valuable materials, by focusing on the manner in which the waste is generated instead of the concentration of toxic materials or the risk to human health or the environment. The concept of establishing exit levels is a first step in creating a system in which risk is incorporated into determinations of whether a waste should be regulated as "hazardous."

MDF9 - Vinyl Acetate Toxicology Group, Inc. WHWP-00122, 1,2 Industry Assn.
Although the Vinyl Acetate Toxicology Group, Inc. (VATG) has reviewed the rule principally from the perspective of its impact on vinyl acetate, the Association believes that the HWIR's use of exit levels and risk assessment represents a significant improvement in determining those wastes that need to be managed under the Subtitle C Resource Conservation and Recovery Act (RCRA) hazardous waste management program. VATG members have long advocated using risk-related concepts such as the degree of hazard to focus regulatory efforts on the greatest hazards to human health and the environment. [...]

MDF9 - General Electric, WHWP-00193, iii,1 Industry
The General Electric Company strongly supports the Environmental Protection Agency's efforts to revise the hazardous waste identification system to allow low risk listed wastes to exit RCRA Subtitle C control. Unfortunately, the December 1995 Hazardous Waste Identification Rule

(HWIR) proposal falls far short of achieving any real reform of the system and in fact, would constitute an extremely adverse precedent if finalized in its current form. The proposed exit levels are set so low that very few wastes will qualify for exit and even fewer will be able to support the cost of the exit demonstration. Overly conservative risk and groundwater fate and transport modeling contribute to the failure of the rule to provide relief as well as other conservative features, such as an unrealistically uncontrolled Subtitle D mismanagement scenario, a draconian enforcement policy, and classification of the proposal as a RCRA, rather than a HSWA, rule. The precedents established by this rule, if promulgated as envisioned, will set back for many years EPA's efforts to reform the RCRA program and form a barrier to future reform efforts. GE is particularly concerned that once overly conservative exit levels are promulgated, EPA will be unable to amend them upward without extremely extensive legal justification. GE believes that many of the problems in this proposal could be resolved if EPA would take the time to step back from its day-to-day responsibilities and develop a long term vision for the future of the hazardous waste identification program. One reason the current proposal fails to achieve anything meaningful is that it was developed in isolation, without any sense of its place in a long term plan to reform the system. EPA needs to develop a vision and an accompanying implementation plan to achieve the vision before moving [to] finalize the December proposal. Only then will EPA be able to develop and justify the truly major reforms that are needed. [...]

MDF9 - State of Missouri, WHWP-00034, 1,3 State
We generally support the intent of this proposed rule because it appears to be consistent with the EPA's original stated intent to revisit the mixture/derived-from rule and provide environmentally safe exits for listed hazardous waste based on toxicity. [....] The exit levels described in the proposed rule and its appendices and tables all appear to be adequately restrictive based upon current risk assessment methodology. We do not believe that there is a discernable increase in threat to human health or the environment posed by the rule, as modified by our comments.

MDF9 - Arizona Public Service Co., WHWP-00158, 1,1 Utility Co./Assn.
As a general matter, APS supports EPA's efforts to replace the sometimes unreasonably burdensome "mixture" and "derived from" rules with a self-implementing risk-based system of "exit levels" for specific hazardous constituents.

MDF9 & HWIR - AF&PA, WHWP-00238, 17,1 Industry Assn.
[The MPRA is designed only to establish exit levels; it should not be used to bring wastes into the RCRA subtitle C system.] In HWIR, EPA proposes "constituent-specific exit levels for low-risk solid wastes that are designated as hazardous because they are listed, or have been mixed with, derived from, or contain listed hazardous wastes." 60 Fed. Reg. 66,344 (emphasis added). The preamble states that "[t]he purpose of this rule is to exempt from hazardous waste regulation those solid wastes currently designated as hazardous waste even though they contain constituent concentrations at levels that pose very low risk to human health and the environment." 60 Fed. Reg. 66,347 (emphasis added). AF&PA supports the Agency's recognition that EPA's traditional

approach to listing hazardous waste, including the mixture and derived-from rules and contained-in policy, can result in over-regulation. The exit levels proposed in HWIR are not, however, designed to serve as "entrance levels" and should not be used to create new hazardous waste listings or establish concentration thresholds for characteristic wastes. Historically, EPA has set hazardous characteristic thresholds at levels which are "clearly hazardous". See, e.g., 54 Fed. Reg. 48,490, col. 1 (Nov. 22, 1989) ("the Agency has always stated that the EP toxicants concentrations are levels at which a waste clearly presents a substantial hazard . . ."). The HWIR proposal has a different purpose and, consequently, takes a different approach. First, EPA set out to exclude low-risk listed wastes from Subtitle C regulation. To do so, it established "exit levels . . . based on risk modeling to a hazard quotient of 1 and a 1 x 10-6 cancer risk". 60 Fed. Reg. 66,351. EPA said of this stringent standard: "In allowing listed hazardous waste to exit the requirements of Subtitle C, the Agency was targeting waste that is clearly not hazardous." Id. (emphasis added). In another portion of the HWIR preamble, EPA reiterated, "[a]gain, the policy goal of exits was to strive to be well below clearly hazardous levels". Id. at 66,352 (emphasis added). The proposed exit levels are the opposite side of the coin of EPA's approach to adding wastes to the Subtitle C regulatory program. Exit levels are established "well below clearly hazardous levels" but entrance levels are established at "levels at which a waste clearly presents a substantial hazard". Thus, the MPRA and the exit levels calculated using that methodology are not useful for adding wastes into the Subtitle C regulatory program. Of course, given the SAB's conclusion that the MPRA "at present lacks the scientific defensibility for its intended regulatory use," the MPRA should not be used for its intended purpose -- that is, to establish exit levels -- let alone for any other regulatory purpose. SAB Report at 2 and 7.

MDF9 - State of Texas, WHWP-00037, Cvr. Ltr. State
Currently, under the "mixture and derived from" rule, listed hazardous waste remains hazardous even when that waste may no longer pose a risk to human health and the environment unless the generator goes through a laborious and costly delisting procedure. We strongly support the development of an alternative to the current system which would allow generators to exit such low-risk hazardous wastes from full Resource Conservation and Recovery Act Subtitle C regulation through a self-implementing but verifiable process. Unfortunately, instead of addressing "low risk" hazardous waste, the proposed rule is geared toward "no-risk" waste. As a result, very little eligible waste will exit under this proposal. The rule may also lead to significant public confusion at contaminated site cleanups when levels left on site (even in residential areas) as "safe" are higher than the proposed HWIR exit levels. We believe that significant change is needed for the rule to be viable.

MDF9 - Capital Returns, Inc. WHWP-00160, 3,1 Other
EPA SHOULD USE THE HWIR INITIATIVE TO PROVIDE A MEANINGFUL EXIT FROM THE HAZARDOUS WASTE REGULATORY SYSTEM FOR EPINEPHRINE, LISTED HAZARDOUS WASTE P042 Capital returns and Abbott support EPA's efforts to address the overbreadth of hazardous waste listings as well as the mixture and derived-from rules. In the HWIR proposal, EPA proposes to adopt a risk-based exemption from the RCRA Subtitle C hazardous waste program for listed wastes and for mixtures and treatment residuals therefrom that

are deemed hazardous wastes by virtue of the "mixture" and "derived-from" rules.1/ 60 Fed. Reg. at 66,349. Capital Returns and Abbott support EPA's efforts to ensure that only those wastes that are truly "hazardous" are subject to Subtitle C. 1/ The HWIR would also apply to wastes that contain listed hazardous wastes and are deemed by EPA to be hazardous under its so-called "contained in" principle. 60 Fed. Reg. at 66,347. In keeping with EPA's own description of this principle as an interpretation of the mixture and derived-from rules, id., and for convenience, Capital Returns and Abbott incorporate without specific reference the"contained in" principle into their discussion of the mixture and derived-from rules.

MDF9 - Capital Returns, Inc. WHWP-00160, 1,4 Other
Capital Returns and Abbott are particularly interested in this rulemaking in light of the current RCRA regulation of epinephrine as a "listed" hazardous waste, EPA Hazardous Waste No. P042, when discarded. Capital Returns and Abbott appreciate EPA's recognition that the hazardous waste listings and "mixture" and "derived-from" rules, which apply to mixtures and treatment residuals from listed wastes, are overbroad, and Capital Returns and Abbott support EPA's efforts to provide a risk-based exit from these overbroad provisions. However, Capital Returns and Abbott are concerned that EPA has not provided warranted relief for epinephrine.

MDF9 - State of Oregon, WHWP-00130, 1,1 State
Oregon DEQ strongly supports EPA's efforts to reform the mixture and derived-from rules, and to create a risk-based approach for allowing hazardous wastes to "exit" the Subtitle C regulatory system. Oregon has been an active participant in this rulemaking process, and wishes to compliment EPA for involving the States as "co-regulators" in the development of this important rule. Having been closely involved with this effort, we fully appreciate the size and complexity of the task, and we commend the Agency's staff and management for its work in putting in place this long-needed, fundamental component of the nation's hazardous waste program. Oregon shares with the Agency the goal of establishing an "exit" system in RCRA Subtitle C that is workable, that is based on good science, and that succeeds in removing from the system those wastes that do not need to be managed within the stringent system of controls that Subtitle C provides. We agree that a rulemaking such as this that is to be applicable nationally must necessarily be conservative, in order to provide an adequate level of protection for a wide range of natural conditions and waste management scenarios. The rule must also, however, be based on realistic assumptions and models, and be flexible enough so that it can be implemented in a common sense manner. Oregon's general concern with the rule as proposed is that the exit levels are overly conservative, and would accomplish very little in terms of actually allowing wastes to exit the Subtitle C system. This general concern is reinforced by the Agency's regulatory impact analysis, which estimates that the benefits of the rule would essentially be negligible when measured against the enormous amount of resources that are currently being expended in this country for hazardous waste management. It is further reinforced by the fact that one-forth of the constituents analyzed had calculated exit levels below the limits of detection.

MDF9 - Hazardous Waste Action Coalition, WHWP-00119, 1,1 Waste Mgmt. Assn.
HWAC supports EPA's attempt to focus RCRA's Subtitle C requirements on those waste streams

that pose an actual risk to public health and the environment. The establishment of concentration levels as a basis for identifying hazardous waste is a vast improvement over the current regulatory scheme which, through the mixture and derived from rules, deem wastes to be hazardous without regard to the level of hazardous constituents therein.

MDF9 - Beazer East, WHWP-00196, 2,1 Waste Mgmt. Co.
In general, Beazer supports the concept of establishing risk-based exit levels that will address the severe hardships that have been imposed upon the regulated community as a result of the inequitable and unfair application of the Mixture Rule and Derived-From Rules in the hazardous waste regulations. However, Beazer believes that the Proposed HWIR fails to accomplish the goals that were announced by EPA in almost every [respect.] First, Beazer disagrees with EPA's position that the Mixture Rule and Derived-From Rules should remain in place and unchanged by the Proposed HWIR given the legacy of unfairness and needless costs that has been documented by the regulatory community. That legacy, coupled with Beazer's belief that the Proposed HWIR will grant virtually no relief to the regulated community, argues forcefully against maintaining this inappropriate regulatory management scheme for listed wastes and mixtures. [...]

MDF9 - Beazer East, WHWP-00196, 2,1 Waste Mgmt. Co.
[...] 1 /Third, Beazer believes that the Proposed HWIR exit levels provide virtually no relief for the regulated public. In fact, EPA has spent more than three years and countless taxpayer dollars developing and evaluating multi-pathway and groundwater risk assessment models for the purpose of creating a fairer approach to dealing with wastes subject to Subtitle C. In direct contrast to this goal, however, EPA has again shown its inability to eschew the use of combinations of unacceptably stringent and overly-conservative risk assumptions that necessarily create regulatory controls (in this case, exit levels) that are completely non-responsive to the actual problem. EPA's own estimates indicate that as proposed, the rule would exempt only 0.4 million tons of non-wastewaters and 64 million tons of wastewaters out of an annual combined total of 303 million tons. In addition, EPA has expanded the breadth of its conservative assumptions (e.g., through the application of ecological risk assessment for the first time in the RCRA program) that further complicates the ability to fashion any relief to the regulated public. Significantly, EPA's risk methodology has been criticized by EPA's own Science Advisory Board ("SAB") as being seriously flawed. These shortcomings with EPA's approach to risk, coupled with a number of additional exemption implementation issues described below, raise serious questions about the value of making such a sweeping change in the RCRA program without discernable benefit. Beazer believes that EPA must critically reassess its approach in light of the comments presented herein to effectuate changes which would be protective of human health and the environment while providing the requisite relief to the regulated community. Anything less than such an effort would be considered arbitrary, capricious and not in accordance with law. [...]

MDF9 - EOC, WHWP-00248, 2,5 Industry
The focus on low-risk wastes has been lost. The overriding goal of the HWIR, to focus on identifying low-risk wastes that had been categorized as hazardous because of scientifically inappropriate and procedurally flawed presumptions within the mixture and derived-from rules,

has been lost. These low-risk wastes should never have been classified by EPA as hazardous. In light of this, it is absolutely inappropriate to require generators to wind their way through a maze of complicated, expensive, "self-implementing" procedures to demonstrate that low-risk wastes are in fact low risk.

MDF9 & MDF2- Ciba-Geigy, WHWP-00197, Ltr. Industry
Ciba is concerned that EPA's proposed rule is so conservative that it will not provide the necessary relief from the current over-regulation of low-risk wastes. For Ciba, incinerator ash and slag, and wastewater treatment sludge are the high volume, low risk process non-wastewater streams that are caught needlessly by the RCRA hazardous waste definition. Incinerator scrubber water and landfill leachate are the high volume, low-risk wastewaters that we feel are inappropriately captured by the RCRA definitions of hazardous waste. We believe that these low-risk wastes should not be listed. To the extent the Agency is determined to attempt to list these wastes, the proper regulatory approach is to initiate a rulemaking using the full regulatory listing procedure for each of these waste types. The following are our main concerns and recommendations about the proposed rule. The rule as proposed sets exit levels and contingent management levels unreasonably low. Our comments show that many ordinary low hazard materials would not be able to exit using the modeled and extrapolated risk-based levels. [...]

MDF9 - Dow, WHWP-00185, 1,3 Industry
Dow supports the efforts of EPA to simplify and minimize over-regulation of RCRA hazardous wastes resulting from the mixture and derived-from rule. This effort has the potential to eliminate or greatly reduce the aspects that currently cause high costs and heavy burdens with little, if any, benefit to human health and the environment. That said, Dow has a very real concern with numerous provisions of the proposed rule and believes that EPA has lost sight of the goal of HWIR which is to minimize the regulatory burden for wastes with insignificant risk. Dow is concerned that the rule as currently proposed will not provide meaningful relief from this over-regulation.

MDF9 - Vinyl Acetate Toxicology Group, WHWP-00122, 1,2 Industry Assn.
[...] The mixture and derived-from rules also created serious waste management problems. Although EPA was justified in trying to prevent a party from avoiding hazardous waste regulation by mixing a listed waste with other wastes and then claiming the mixture was not the listed waste, as a practical matter, these rules have created serious costly impediments in instances where small quantities of listed wastes may have been combined with non-hazardous wastes and as a result limited the flexibility to use certain types of treatment methods, because the material even treated, remained as the "listed waste. [...] VATG believes that the proposed HWIR represents an innovative, yet conceptually sound effort to improve the Subtitle C hazardous waste management program. EPA has recognized that the current program has numerous regulatory anomalies and has undertaken a genuine effort to resolve them using risk data and adequate conservatism to ensure the protection of human health and the environment.

HWIR & MDF9 - Caufield Enterprises, WHWP-00035, 1,3 Consultants
While we support relief from the mixture regulation, we believe that the proposal is so complex and costly in its implementation, that it is useless for small businesses. Even large businesses are unlikely to use it because the relief is more expensive than the disposal except perhaps for a few large volume wastes. The testing costs and the other requirements for exemption make this proposal so costly that sources with small volumes of wastes won't use it.

MDF9 - DOE, WHWP-00072, 18,3 Federal Govt.
[...] However, the Department is concerned that, in practice, only a limited number of waste streams may be able to utilize the proposed exemption requirements. With this result, the proposed rule would not achieve the intended goal of reducing "overregulation of low-risk wastes captured by the mixture and derived-from rule." [...]

MDF9 - Steel Manufacturers Assn., WHWP-00094, 15,4 Industry Assn.
[...]Given these large implementation costs and relatively modest savings in treatment and disposal costs, the proposed HWIR will not do much to remedy the problem of overregulation of low-risk wastes resulting from application of the mixture and derived-from rules. This is particularly true in the case of small waste streams, which represent the majority of waste streams potentially eligible for the exemption. See id.

MDF9 - Specialty Steel Industry, WHWP-00093, 18,3 Industry Assn.
[...]Given these large implementation costs and relatively modest savings in treatment and disposal costs, the proposed HWIR will not do much to remedy the problem of overregulation of low-risk wastes resulting from application of the mixture and derived-from rules. This is particularly true in the case of small waste streams, which represent the majority of waste streams potentially eligible for the exemption. See id.

MDF9 - Chrome Coalition, WHWP-00095, 17,3 Industry Assn.
[...]Given these large implementation costs and relatively modest savings in treatment and disposal costs, the proposed HWIR will not do much to remedy the problem of overregulation of low-risk wastes resulting from application of the mixture and derived-from rules. This is particularly true in the case of small waste streams, which represent the majority of waste streams potentially eligible for the exemption. See id.

MDF9 - Leather Industries of America WHWP-00096, 17,2 Industry Assn.
[...]Given these large implementation costs and relatively modest savings in treatment and disposal costs, the proposed HWIR will not do much to remedy the problem of overregulation of low-risk wastes resulting from application of the mixture and derived-from rules. This is particularly true in the case of small waste streams, which represent the majority of waste streams potentially eligible for the exemption. See id.

HWIR & MDF9 - SOCMA, WHWP-00138, 6,5 Industry Assn.
The complexity and cost of the proposed requirements for exempting a single wastestream under HWIR are staggering. Few, if any, SOCMA members would be able to benefit from this proposal. As such, SOCMA is concerned that the proposed rule fails to grant small businesses and batch processors any regulatory relief from the mixture and derived-from rules.

[In particuler, the HWIR proposal provides no relief to batch processors.] The implementation requirements in the proposed rule fail to reflect any consideration for the waste management and production practices of batch processors. Many batch processors change processes frequently, even more than once a day. They typically use processes that generate low volumes of hazardous waste at any one time. Many of these facilities rely exclusively on the 90-day on-site provision for on-site management of hazardous waste. SOCMA has reviewed these characteristics of the batch processing industry with EPA on a number of occasions.

Unfortunately, the exemption requirements in the proposed rule virtually assure that only large companies that generate high-volume, constant wastestreams can economically take advantage of the proposed exit levels. A batch processor with sales of $40 million per year, which is typical of a SOCMA member company, may change processes slightly each day or even produce different kinds of chemicals each day. The Agency's proposed first-year start-up costs of $55,000 to $235,000 per wastestream, with an annual second and third year cost of $9,000 to $209,000 per wastestream, are prohibitively expensive for small businesses. See 60 Fed. Reg. at 66417. Such costs are even more unrealistic for batch processors who may generate wastestreams sporadically and in low volumes.

In the preamble to the proposed rule, EPA represents that it proposed only "[those] testing and notification requirements [which] are necessary to ensure that only those hazardous wastes which truly meet the exemption criteria exit the Subtitle C system." 60 Fed. Reg. at 66386. SOCMA disagrees with this statement. [SOCMA has numerous concerns regarding the HWIR exemption implementation provisions.] As it moves forward with the HWIR program, EPA needs to reevaluate these provisions and reassess whether all of the proposed testing, notification and recordkeeping requirements are truly "necessary" to assure compliance with this program.

HWIR & MDF9 - GPU Nuclear Corp, WHWP-00208, 4,3 Utility Co./Assn.
The EPA was challenged in court and tasked by Congress to revise the mixture and derived from aspects of the hazardous waste regulations. The EPA must allow realistic access by the entire regulated community to the relief granted by the revisions. The EPA admits only three industries will reap the majority of the benefits. This alone shows inadequacy of the proposed rule.

HWIR & MDF9 - BFI, WHWP-00139, 8,2 Waste Mgmt Co.
For more than 99 percent of the regulated universe generating listed hazardous waste, the proposed HWIR rule offers no relief from the inflexibility of the waste listing process and the wooden application of the mixture and derived from rules. Indeed, only 21 percent of the total universe of

listed waste is likely to be eligible for exemption under the baseline proposal. Moreover, of the several thousand facilities generating listed non wastewater, that are likely to be able to meet the HWIR exit levels, only 2-3 hundred facilities would have a financial incentive to take advantage of the lowered costs of Subtitle D disposal. All these facilities are Fortune 500 companies generating extraordinarily large volumes of eligible listed hazardous wastes.

MDF9 & HWIR & MDF14 - State of Pennsylvania, DEP, WHWP-00167, 3,4 State Govt

EPA requests comments on three contingent management options identified as Options Four, Five and Six at 60 FR 66398-99. Pennsylvania supports the following concepts:

1. Pennsylvania agrees with the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) that the system used to qualify state facilities should allow states to self-certify facilities and should not follow the model used for municipal waste Subtitle D approvals. Pennsylvania supports Option 4 with the qualification that states self-certify their programs.

2. Pennsylvania also agrees with ASTSWMO that EPA should offer a finalized contingent management rule as part of this HWIR rulemaking effort. This rule should allow contingent management at qualified double-lined disposal facilities with a resulting risk not to exceed 1 E-6 and HQ 1 for mixture-rule wastes with higher concentrations than those in proposed Table A of Appendix X. Further refinements may await a more detailed future rulemaking.

3. Landfill facilities that substantially meet 40 CFR Parts 257-58 or 264 should be allowed to accept LDR treated mixture-rule wastes that do not exceed a risk level of 1 E-3 or HQ 10 (in an unregulated setting).

4. LDR treatment should be required of mixture-rule process wastes.

5. Pennsylvania also supports Option Six because we believe that the state's double-lined municipal or residual waste landfills will ensure protection up to at least the levels of 1 E-6 and HQ1. 60 FR 66399.

6. Pennsylvania believes that only those states which have broadly qualified programs should be authorized to allow contingent management of wastes posing up to 1 E-3 and HQ 10 risk levels (in an unregulated setting). States which do not have qualified programs for treatment or disposal of contingently managed wastes should not be authorized to allow exit through contingent management of wastes generated in those states because of the increased difficulties in the tracking and monitoring of successful contingent management.

7. Pennsylvania supports the use of waste analysis/waste acceptance plans for qualified facilities. Disposal of certain mixture-rule waste would only be authorized after consideration of site characteristics such as liner compatibility, leachate treatment systems and other site-specific factors. State programs would approve classes of wastes at a particular facility after review of

appropriate waste analysis data.

8. Pennsylvania does not support the use of land application or surface impoundments for mixture-rule wastes that pose a risk greater than 1 E-6 or HQ 1.

9. Pennsylvania does not at this time support the use of single-liner or unlined landfills for mixture-rule wastes that pose a risk greater than 1 E-6 or HQ 1. These options may be considered at a future time for captive sites or sites with particular hydrogeology or climate characteristics.

MDF9 - Cyprus Amax Minerals Company, WHWP-00099, 3,2 Industry
[The exit levels proposed under HWIR must be utilized solely to replace the vacated mixture and derived-from rules, and must not serve as New vriteria for listing or Otherwise identifying hazardous waste under RCRA.] EPA purportedly intends for the proposed exit levels to serve solely as a means of exiting the RCRA Subtitle C system, thereby "reduc[ing] any over-regulation of low-risk wastes captured by the mixture and derived-from rule." 60 Fed. Reg. 66346. EPA must ensure that the exemption levels promulgated as a result of this rulemaking are not utilized to further expand Subtitle C regulation of materials that do not pose significant risks to human health and the environment. Rather, the HWIR should be specifically focused on strictly following the Shell Oil mandate, replacing the mixture and derived-from rules and bringing the hazardous waste identification system into compliance with RCRA's statutory directives. See RCRA Section 1004(5); 42 U.S.C. Section 6903(5). The exit levels must be promulgated solely for the purpose of allowing low-risk waste not otherwise excluded 1/ from the definition of hazardous waste to exit the RCRA Subtitle C system.

The HWIR exit levels are not criteria for "entry" into the system and thus should not be regarded as determinative of whether or not a waste is considered or otherwise identified as hazardous under RCRA. Unfortunately, EPA erroneously asserts in the preamble that "[t]hose wastes that would remain subject to the mixture and derived-from rules typically will pose risks that warrant regulation under Subtitle C." 60 Fed. Reg. 66348. This statement implies that any wastes with concentrations higher than exit levels should be regulated as hazardous. [This] broad assertion is completely without scientific or technological evidentiary support. Moreover, by virtue of the mere existence of the proposed exit levels, wastes that are not even identified or listed as hazardous wastes subject to Subtitle C may be deemed as such by other concerned entities, e.g., municipalities, states, or privately owned treatment works ("POTWs"), if they contain constituent concentrations exceeding HWIR exit levels. EPA's erroneous blanket conclusion thus threatens to increase, rather than reduce, the burden already imposed by the existing regulatory structure.

1/ Bevill Amendment-excluded wastes will not be affected by this Proposed Rule, regardless of the levels of constituents contained in the excluded waste. 42 U.S.C. Sections 6921(b)(3)(A)(ii), 6924(x). In enacting the Bevill Amendment, Congress specifically recognized that high-volume, low-risk wastes excluded under the amendment (i.e., wastes from the extraction, beneficiation, and certain processing of ores and minerals) do not pose a threat to human health or the environment and are not subject to Subtitle C controls. Thus, any attempt on the part of the Agency to implement HWIR in a manner that erodes the Bevill Amendment, and thereby

contradicts Congress' intent, would be wholly unauthorized.

MDF9 - State of Washington, WHWP-00250, 1,2 State Govt.
EPA should broaden the entry criteria as well as develop an exit criteria. We recognize and support the need to address the problem associated with the "mixture" and "derived from" portions of the definition of hazardous waste. It has long been clear to Washington State regulators that many treatment residuals and some "as-generated" waste captured by these rules do not pose sufficient risk to warrant regulation as hazardous waste. At the same time, there is a significant volume of "as-generated" waste and contaminated media that never becomes subject to Subtitle C regulation due to the limitations of the listings and the Toxicity Characteristic. Washington State believes that these wastes pose a risk to human health and the environment. They often contain Appendix VII and VIII hazardous constituents at concentrations many orders of magnitude above the proposed exit criteria. These wastes typically have the same physical characteristics as RCRA wastes. In Washington State these wastes are regulated by our state classification system and comprise approximately 50% of the total amount of hazardous waste regulated in our state. Therefore we strongly encourage EPA to broaden the entry criteria of RCRA provided a viable, self-implementing exit criteria is developed.

MDF9 - American Iron and Steel Inst. WHWP-00165, 13,2 Industry Assn.
Even though the stated purpose of the HWIR rule is to provide regulatory relief from the unlawful and extremely burdensome overbreadth of the mixture and derived-from rules, EPA's proposed rule would provide little, if any, practical relief to the iron and steel industry. AISI strongly believes that a proper risk assessment would demonstrate that many of the mixture and derivatives generated or managed by iron and steel making facilities do not pose a substantial threat to human health or the environment, and therefore should be allowed to exit Subtitle C. Because the proposed rule would not allow almost any of these wastes to exit the hazardous waste regulatory program, it is important that EPA substantially revise the HWIR proposal before promulgating it in final form. A number of specific suggestions for revising the HWIR proposal are set forth in the following sections of these comments.

MDF9 - APCA, WHWP-00155, 1,2 Industry Assn.
APCA is a non-profit trade association representing virtually all (in excess of 40) domestic manufacturers and marketers of portland cement. The cement industry applauds the Agency's HWIR efforts as a good faith attempt to rationalize the overly conservative nature of the Subtitle C program wrought by the "mixture" and "derived from" rules. Unfortunately, however, this proposal stops short of any meaningful regulatory relief, and instead proposed to establish new, cumbersome "unconditional" and "conditional" Subtitle C exemption programs. [...] First, we endorse the general thrust of EPA's proposal to the extent it envisions a tailored, site-specific approach to protection of human health and the environment. APCA agrees that the traditional "one-size-fits-all" approach of RCRA rules -- where costly and stringent standards designed to address worst-case management and worst-case receptor situations are nevertheless imposed uniformly throughout the U.S. -- should be abandoned. The industry believes the traditional

approach has in fact often been imposed at tremendous costs that are often grossly disproportionate to the benefits (if any) gained in terms of health and environmental protection. In addition, the stigma of legally classifying a material as "hazardous" is often harsh and unjustified in light of whatever minimal (if any) gains are achieved by such classification. "Accordingly, we endorse the following statement in EPA's preamble: EPA now believes it may be appropriate to find that, where mismanagement is not likely or has been adequately addressed by other programs, EPA need not classify a waste as hazardous and that there may be ways to recognize situations where the limitations on likely 'mismanagement' are specific to a State, a type of waste, or a facility-specific condition on how a waste is managed [(60 FR 66395; December 21, 1995 Federal Register)]". In fact, it is just this kind of rational thinking that underlies the enforceable agreement for CKD. As mismanagement would not be likely, especially because of the enforcement agreement, there would be no need to classify CKD as hazardous and/or to issue rules Subtitle C for it.

MDF9 - Amoco Corp., WHWP-00117, 1,2 Industry
We strongly support EPA's intent to amend its regulations under the Resource Conservation and Recovery Act (RCRA) to provide exit levels for low risk solid wastes that are designated as hazardous because they are listed, or have been mixed with, derived from, or contain listed hazardous wastes. This amendment is long overdue. However, the exit levels are too low for the proposed rule to provide any meaningful relief and the process proposed by the agency is too costly.

MDF9 - BP Chemicals, WHWP-00205, 1,4 Industry
In general, BP Chemicals supports the overall concept of HWIR. It establishes a framework for meaningful reform to the historically overreaching mixture and derived-from rules. The RCRA hazardous waste management program will be substantially improved with the addition of a process that provides low risk wastes with a constituent concentration-based exemption from RCRA Subtitle C management standards. However, as discussed in our comments below, we believe the proposal as currently crafted establishes excessively stringent exit levels and consequently provides very little benefit to the regulated community as a whole and to our company specifically. We urge the Agency to make modifications that will allow for more of the low risk waste streams to exit Subtitle C thereby increasing the utility of the rules to the regulated community.

MDF9 - A.P. Colors, WHWP-00056, 1,1 Citizen
I believe it was Abraham Lincoln who said "You can fool some of the people some of the time, but you can't fool all of the people all of the time." This statement came to mind as I read HWIR II. You see I remember HWIR I, which was a more honest attempt to reform the illegal mixture and derived from rules than this current effort. The USEPA has effectively cloaked their unwillingness to make any real reform under the guise of multimedia risk assessments, monte carlo simulations, waste minimization, and environmental justice, although my eyes were so glazed over in attempting to read the pseudo-scientific mumbo-jumbo called preamble that I might be imagining the

environmental justice mantra. USEPA has very cleverly and deviously thwarted any meaningful reform, camouflaging this in their unrealistic assumptions and the impossible exit criteria of ridiculously low totals concentrations along with achievable leachable concentrations, throwing in the burden of evaluating almost 400 constituents for each waste exiting the system, presumably just in case someone gets close to escaping. I am waiting for a USEPA spokesperson to say with a straight face that the totals limit of 10 ppm for the metal chromium and an even lower totals limit of 6 ppm for the "toxic" metal copper represent an honest attempt to grapple with the inane outcomes of the current interpretations of the mixture and derived from rules. Come on folks, my vitamins don't even meet these criteria!

I am sure that USEPA has made their friends at the Natural Resources Defense Counsel and the Hazardous Waste Treatment Council very happy. Oh, I forgot, the Treatment Council changed their name because some people had caught on that they were a monopolistic, anti-competitive organization. The NRDC and the HWTC would be happy if all industrial wastes were hazardous, and had to be managed at member companies. I predict that the NRDC and HWTC will express some concerns that USEPA may be allowing what they perceive to be the criminal class of hazardous waste generators too easy a way out, while privately congratulating themselves and USEPA staff on a "job" well done on a very difficult public policy issue". Meanwhile, in Orwellian America, reform means what the government says it means, and any previous meanings, such as HWIR I, go into the memory hole.

[...]

I have to hand it to the Agency, they have made it appear to the outside observer (e.g., Congressional oversight committees, the Judiciary, the media, and even those without the time to read hundreds of pages on incredibly boring preamble language) that they have made an honest attempt at reform. However, the Agency has achieved its goal of thwarting real reform without appearing to do so. Like the mythical character Diogenes, I continue to carry a lantern looking for an honest regulatory agency reformer. I have yet to find the person.

MDF9 - CMA Metal Catalysts Panel, WHWP-00075, 1,3 Industry Assn.
The Metal Catalysts Panel of the Chemical Manufacturers Association (CMA) 1/ supports a self-implementing mechanism to allow low risk, listed hazardous wastes to "exit" the RCRA Subtitle C regulatory regime. Such a mechanism is warranted and long overdue. For almost 16 years generators of low risk wastes have been forced to manage these wastes as hazardous wastes, irrespective of whether the wastes actually pose substantial hazards to human health and the environment and thus meet the RCRA Section 1004 definition of "hazardous waste." These wastes have been regulated under RCRA solely on the basis of the broad "mixture rule," "derived-from rule," and "contained in" policy.

EPA's proposal to supplant the current "one-size-fits-all" regime under RCRA Subtitle C with a mechanism that would establish constituent-specific exit levels for low risk listed hazardous wastes is commendable. The approach recognizes that the criterion by which a waste should be judged hazardous is the risk that the wastes poses. As EPA has acknowledged, although the

current delisting program exists, the detailed waste-specific review required for delisting is not necessary for the low risk wastes that EPA wishes to address in the HWIR (see 60 Fed. Reg. 66347.)

1/ Current Panel members are Akzo Nobel Chemicals, Inc.; CRI International, Inc.; CRI-MET; Criterion Catalysts Co.; L.P. Crosfield Catalysts; Engelhard Corporation; Gulf Chemical and Metallurgical Co.; Haldor Topsoe, Inc.; Mallinckrodt Chemical, Inc.; OM Group, Inc.; UOP; W.R. Grace; and United Catalysts, Inc.

MDF9 - E.I. DuPont, WHWP-00182, 1,1 Industry
DuPont strongly supports the primary intent of HWIR, which was to establish constituent-specific risk-based exemption levels for listed hazardous wastes, mixtures of listed hazardous wastes and solid wastes and residues derived-from managing listed hazardous wastes. Under current rules, these wastes continue to be designated as hazardous waste although they are generated with constituent concentrations that pose low risks or are treated in a manner that reduces constituent concentrations to low levels of risk. We commend the Agency on its attempts to make this proposal self-implementing and conceptually reasonable, particularly with regard to the concepts of extrapolating exit values where adequate, necessary data are unavailable, and the proposal to base exit values on quantitation limits when neither risk-based or extrapolated exit values could be developed. However, the exit levels are so conservative that few wastes will meet them; indeed, many common foods, many, if not most, treated effluents from POTWs and municipal sewage sludge, including many industrial bio-treatment sludges currently being land applied, would not qualify for exit if they were listed hazardous wastes.

MDF9 - IPC, WHWP-00083, 18,2 Industry Assn.
The purpose of the HWIR, as stated in its preamble, is to "reduce any overregulation of low-risk wastes captured by the mixture and derived-from rule." 61 FR 66348. IPC believes that the current proposal does not achieve EPA's goal. The proposed exit levels are unattainable for the low-risk wastes for which the rule is intended. In addition, the proposed procedural and enforcement provisions are burdensome, costly, and fraught with potential liability exposure - all of which will discourage facilities from using the HWIR. As a result, a majority of low-risk wastes will remain subject to RCRA Subtitle C, which will drive up the demand for Subtitle C waste management capacity and impose unnecessary regulatory costs and burdens on regulated entities.

MDF9 - Nat'l Assn. of Manufacturers, WHWP-00140, 1,1 Industry Assn.
The NAM supports the basic intent of the proposed HWIR; that is, to establish constituent-specific exit levels for low-risk solid wastes that are designated as hazardous because they are listed, or have been mixed with, derived from, or contain a listed hazardous waste. As the EPA recognizes, establishing appropriate exit levels for those wastes would eliminate unnecessary and significant economic and administrative burdens, as well as unnecesary regulatory obstacles. We also support and appreciate the agency's efforts to employ contingent management.

IPC urges EPA to re-propose the HWIR so that it contains exit levels that are based on realistic waste management scenarios, including recycling, and implementation procedures that would actively encourage facilities to remove their low-risk wastes from Subtitle C management. Any HWIR must be cost effective and feasible for small quantity generators and small businesses.

Most importantly, any new HWIR proposal must encourage the reuse and recycling of wastes and manufacturing by-products instead of their land disposal. Although IPC supports the concept of the proposed conditional exemption, IPC urges EPA to include a "recycled exemption" alternative in the HWIR, which would ensure that materials that are generated from a manufacturing process which are destined for reclamation could also be eligible for HWIR exemption. Without such a provision, waste generators would land dispose materials with high reclamation potential just to remove such wastes from the burdensome and costly requirements of Subtitle C.

Until such an HWIR is proposed and finalized, IPC urges EPA to streamline the current delisting process so that manufacturing by-products that have high re-use and recycle potential, such as F006, can escape RCRA Subtitle C hazardous waste management. Although the current RCRA delisting process is time-consuming and expensive for facilities, it offers a more certain exemption than the HWIR. Improvements could include developing criteria for the consistent and reasonable implementation of delisting programs by the regions and increasing the use of categorical industry exemptions for process by-products that do not significantly vary across the industry.

MDF9 - Nat'l Auto Radiator Service, WHWP-L0005, 1,2 Industry Assn.
NARSA commends the Environmental Protection Agency ("EPA") for attempting through Hazardous Waste Identification Rule ("HWIR") "to reduce any overregulation of low-risk wastes captured by the mixture and derived-from rules" 1/. Specifically, EPA intends the HWIR to amend the Resource Conservation Recovery Act ("RCRA") and provide an effective method for removing low-risk solid waste from the hazardous waste program "by establishing constituent-specific exit levels for low-risk solid wastes that are designated as hazardous because they are listed, or have been mixed with, derived from, or contain listed hazardous wastes" 2/. The adoption of appropriate exit levels for low-risk wastes would eliminate significant financial, administrative, and time burdens on businesses, especially small businesses, where risk to human health and the environment is negligible.

While NARSA agrees with and supports the overall deregulatory and self-implementing objectives of the HWIR initiative, it disagrees with many of its specific elements. Primarily because NARSA believes that the proposed exit levels establish extremely low and inaccurate exit levels, and that the HWIR mandates excessive implementation costs and burdens, it concludes that relatively few waste types would be eligible for the proposed exemptions. This is particularly true for small wastestreams, which represent the majority of the wastestreams potentially eligible for the exemption 3/. As proposed, the HWIR provides scant practical regulatory relief to businesses, especially small businesses, such as radiator repair shops.

1/ 60 Fed. Reg. at 66346. See also id. at 66413-66414.

2/ See id. at 66344.

3/ See id. at 66416.

MDF9 - Penta Task Force, WHWP-00136, 2,1 Industry
The Penta Task Force supports the Agency's determination to take steps to remedy the overbreadth of its mixture, derived-from, and contained-in principles as they may affect low-risk hazardous waste streams. Indeed, the Penta Task Force believes that an effort to confine the scope of the Agency's definition of hazardous waste by means of constituent-specific numeric exemption criteria is long overdue and may potentially benefit generators of low-risk hazardous waste streams by avoiding unnecessary treatment and disposal costs for wastes that present little or no risk. Conceptually, HWIR could serve to encourage pollution prevention, waste minimization, and the development of innovative waste treatment technologies by rewarding generators of less "toxic" waste with less stringent regulation. Nevertheless, the Penta Task Force is concerned that the exit levels established for many of the waste constituents, including pentachlorophenol, are far too stringent and do not reflect realistic real-world risks. The problem, as will be seen, relates to the risk assessment methodology that EPA has developed specifically for this rulemaking. Also, the Penta Task Force believes that the HWIR proposal is deficient in that it would impose testing, recordkeeping and other requirements on generators that are overly burdensome, costly to implement, and in many respects unnecessary.

MDF9 - Thermal Fluids Council, WHWP-00135, 2,1 Industry Assn.
The Council supports EPA's general direction in proposing the HWIR, and recognizes the considerable effort and resources that the Agency has dedicated to date to develop the proposal. Exempting low risk wastes from Subtitle C regulation is both sensible and consistent with the statutory scheme. The statute defines hazardous waste as a waste that may "significantly" contribute to an increase in mortality or serious injury or "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. Section 6903(5) (emphasis added). Thus, only wastes that have the potential to create significant health or environmental risks should be treated as hazardous wastes under the statute. Strict regulation of low risk wastes, which results under the current "derived from" and "mixture" rules in the absence of reasonable exit levels, provides negligible environment benefits, wastes valuable societal resources, and unnecessarily burdens both industry and regulatory agencies.

MDF9 - DoD, WHWP-L0004, 4,5 Federal Govt.
DoD commends EPA for its proposal to exempt low-risk wastes, mixtures, and derived-from waste residues from RCRA's scheme of "cradle-to-grave" regulation. DoD also approves EPA's forward-thinking determination that, where such low-risk wastes, mixtures, and derived-from waste residues are already subject to RCRA, these wastes should be allowed a risk-based exit from the system. Moreover, DoD is encouraged by EPA proposing a promising multiple pathway

risk assessment process which reflects consideration of direct and indirect routes of toxic exposure to set RCRA exit levels for constituents of concern. DoD strongly encourages EPA to develop additional approaches that will facilitate low-risk wastes escaping the burdens of the RCRA regulatory system.

MDF10 - Eli Lilly and Co., WHWP-00201, 2,1 Industry
[...] 2/ The delisting mechanism does not cure the overbreadth of the mixture and derived-from rules, as agencies cannot exercise powers denied them by Congress by using a variance mechanism to bring the regulations back within statutory boundaries. In re Surface Mining Regulation Litigation, 627 F.2d 1346, 1358-59 (D.C. Cir. 1980) (regulatory limitation on blasting within 1000 feet of structures was inconsistent with statutory authority requiring a 300 foot limitation, despite a variance permitting the approval of distances in the 300 to 1000 foot range). In any event, the delisting program is so slow, lacking in agency resources and unduly onerous as to be virtually unavailable in most cases. The Agency essentially admits that the delisting process is unavailable in this comment in the HWIR proposal: "the delisting process remains available (at least at the state level)...." 60 Fed. Reg. 66348. States (and even EPA Regional offices) traditionally have not had the authority to issue delistings, and many states do not have such a program. It is disturbing that the Agency is reluctant to admit the significant strides made by state Subtitle D programs as a rationale for allowing exit from Subtitle C, but relies on an essentially non-existent state program of delistings as a safety valve for the over breadth of the derived from rule.

MDF10 - National Coil Coaters Assn., WHWP-00192, 6,1 Industry Assn.
[...] 2/ The delisting mechanism does not cure the overbreadth of the mixture and derived-from rules, as agencies cannot exercise powers denied to them by Congress by using a variance mechanism to bring the regulations back within statutory boundaries. In re Surface Mining Regulation Litigation, 627 F.2d 1346, 1358-59 (D.C. Cir. 1980) (a regulatory limitation on blasting within 1,000 feet of structures was inconsistent with statutory authority requiring a 300-foot limitation, despite a variance permitting the approval of distances in the 300 to 1,000 foot range). In any event, the delisting program is so slow, lacking in Agency resources and unduly onerous as to be virtually unavailable as an option in most cases. 3/ As noted above with respect to the mixture and derived-from rules, the delisting mechanism is insufficient to cure the regulatory overbreadth of the hazardous waste listings.

MDF10 - Capital Returns, Inc., WHWP-00160, 3,2 Other
[...] 2/ The delisting mechanism does not cure the overbreadth of the mixture and derived-from rules, as agencies cannot exercise powers denied to them by Congress by using a variance mechanism to bring the regulations back within statutory boundaries. In re Surface Mining Regulation Litigation, 627 F.2d 1346, 1358-59 (D.C. Cir. 1980) (a regulatory limitation on blasting within 1,000 feet of structures was inconsistent with statutory authority requiring a 300-foot limitation, despite a variance permitting the approval of distances in the 300 to 1,000 foot range). In any event, the delisting program is so slow, lacking in Agency resources and unduly onerous as to be virtually unavailable as an option in most cases.

MDF10 - SOCMA, WH2P-00035, 1,3 Industry Assn.

SOCMA and its members are extremely disappointed by the continued failure of EPA to provide substantive relief from the long-standing problems caused by the mixture and derived-from rules set out in 40 C.F.R. §§ 261.3(a)(2)(iii), (iv) & 261.3(c)(2)(I). Many SOCMA members are small to medium-sized companies engaged in batch and specialty chemical manufacturing operations. As such, these companies routinely manage changes in product lines and product mix that result in the generation of a variety of multiple and shifting, smaller volume waste streams. Consequently, the only current mechanism for obtaining relief from the mixture and derived-from rules a delisting petition is of virtually no practical value to these types of operations. [...]

MDF10- Capital Returns, Inc., WHWP-00160, 5,2 Other
[...] As with the mixture and derived-from rules, the delisting mechanism is insufficient to cure the regulatory overbreadth of hazardous waste listings. Variance mechanisms such as the delisting provision cannot cure overreaching of statutory authority, and this particular mechanism is so cumbersome and lacking in Agency resources as to be unavailable in most cases. The same is true for the general variance provisions in the RCRA regulations that allow EPA to modify or revoke specific RCRA regulations in particular cases. See 40 C.F.R. section 260.20(a). In fact, a representative of Abbott's Hospital Products Division submitted an inquiry regarding the availability of a variance for epinephrine over a year ago, and as of yet has received no response whatsoever, in spite of repeating the inquiry in the meantime. See Letter from Mr. John Robbins (Manager of Hospital Products Division Environmental Engineering, Abbott Laboratories) to U.S. EPA Office of Solid Waste (Feb. 14, 1995) (included in Attachment 1 to these comments); Letter from Mr. John Robbins (Manager of Hospital Products Division Environmental Engineering, Abbott Laboratories) to U.S. EPA Office of Solid Waste (April 5, 1995)

MDF10 - SOCMA, WH2P-00035, 5,1 Industry Assn.
[...] In this regard, SOCMA notes that the burdens imposed by the mixture and derived-from rules can be even more significant for SOCMA members. Many SOCMA members are small to medium-sized companies engaged in batch and specialty chemical manufacturing operations. As such, these companies routinely manage changes in product lines and product mix that result in the generation of a variety of multiple and shifting, smaller volume waste streams. Consequently, the only current mechanism for obtaining relief from the mixture and derived-from rules - a delisting petition - is of virtually no practical value to these types of operations.

MDF10 - SOCMA, WH2P-00035, 7,2 Industry Assn.
[...] B. Delisting Petitions, the Only Current Relief from the Mixture and Derived-From Rules, Are Of Limited Practical Value Under the mixture rule, if a listed waste and any other waste are mixed together, the resulting mixture is automatically classified as that listed hazardous waste as well. 40 C.F.R. § 261.3(a)(2)(iii), 261.3(a)(2)(iv). Under the derived-from rule, essentially any residue derived from the treatment or management of a listed hazardous waste is automatically classified as that listed hazardous waste. 40 C.F.R. §261.3(c)(2)(I). These provisions regularly cause many low-risk wastes and residues to be classified as listed hazardous wastes subject to Subtitle C regulations. Significant reform of, and relief from, the overly broad scope of these rules has been a

goal of industry since the start of the RCRA program. At present, the only regulatory mechanism available for obtaining relief from the mixture and derived-from rules is the filing of a delisting petition under 40 C.F.R. § 260.22. In the preamble to the HWIR Proposal, EPA offers the following discussion of the delisting petition option Once a waste is identified as a listed hazardous waste, it remains regulated as hazardous, even if it has been treated to remove all hazardous chemicals, unless the wastes are formally delisted. Delisting under 40 CFR 260.22 requires a formal rulemaking process under the Administrative Procedures Act (APA). Delistings are waste stream specific, with close government review of sampling procedures, analytical test results, and the accompanying quality assurance and quality control (QA/QC) data. This process has the advantage of tailoring the delisting determination to the specific waste, but it is also resource intensive and time consuming for both the petitioner and the government. (64 Fed. Reg. 63381, 63391.) The amount of' information required for a petition under Section 260.22 is substantial. Compiling this information and drafting a delisting petition requires a substantial commitment of technical and administrative resources, time and money, and smaller companies and smaller facilities often face greater difficulty in freeing up the technical and administrative manpower, time and money needed for this effort. Even after the initial preparation of a petition, substantial further time and effort are required of both the petitioner and the government simply to evaluate and agree on the accuracy and completeness of the petition. Further, since the petition must be proposed by notice-and-comment rulemaking, the time between the initial submission of a petition, its proposal in the appropriate federal or state register and final agency action on the petition can literally be a matter of years. Thus, delisting petitions are in several ways singularly ill suited to provide regulatory relief to the typical batch or custom chemical manufacturing operation. The time required to process these petitions is an especially significant limitation on their utility to many SOCMA members. As noted above, many SOCMA members deliberately manage hazardous wastes so as to avoid needing a Part B hazardous waste permits for any aspect of their operations. Consequently, these members routinely manage hazardous wastes in 90-day storage units in accordance with 40 C.F.R. § 262.34. There is absolutely no means by which a generator can pursue a successful delisting petition within this 90-day time period. Hence, these facilities inevitably must classify low-risk wastes and residues in accordance with the mandates of the mixture and derived-from rules in order to ship them off-site within the 90-day period. Another significant hurdle that precludes the use of delisting petitions by batch and custom chemical manufacturers is the cost of the petition process. A delisting petition may be a cost-effective process for a commodity chemical manufacturer that produces a large volume of the waste stream at issue, on a routine, continuous basis (typically year-round). However, the testing, analytical and administrative costs required to develop and process a delisting petition are simply not cost-effective for smaller-volume waste streams produced on a sporadic basis by batch processers. Consequently, under the present regulatory scheme, batch and specialty chemical manufacturers are left without any viable mechanism for seeking to exclude low-risk waste streams from the overly broad impact of the mixture and derived-from rules.

MDF10 - Vinyl Acetate Toxicology Group, WHWP-00122, 1,2 Industry Assn.
[...] VATG also believes that the proposed rule represents an improvement over the existing system with regard to the listing of hazardous wastes and the mixture and derived-from rules. In listing categories of wastes in the original Subtitle C regulations, EPA recognized that wastes within individual categories could differ significantly in their constituent content and hazard.

Therefore, EPA included a "delisting" program option. However, the delisting program has largely been inapplicable to wastes with organic constituents, due to the unreasonably rigid delisting levels. Therefore, listed wastes presenting low risks continued to be regulated as "hazardous. [...]

MDF10 - DuPont, WHWP-00182, 4,2 Industry
[...] Although the petition procedures of 40 CFR 260.20 and 260.22 will continue to exist, such a solution creates unnecessary burden on both the Agency and the regulated community for the excessive number of wastes that contain only small amounts of wastes listed in 40 CFR 261 Subpart D that can be effectively and efficiently managed without rigorous Subtitle C regulations

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.

MDF10 - Onyx Env. Services, WH2P-00015, 6, 1 Waste Mgmt. Co.
The agency also states in the preamble comments (Section II, E, page 63387) that the desisting process provides an avenue for owners/operators of combustion devices to obtain exclusion from subtitle C regulation. An owner/operator can obtain a delisting petition, however, it is a lengthy and expensive process that demands resources from both industry and the agency. Providing the regulatory relief proposed by OES to all permitted and interim status hazardous waste combustion facilities, would eliminate the great deal of time, effort, and expense associated with preparing and reviewing delisting petitions.

MDF10 - State of Delaware, HWMB, WHWP-00237, 1,1 State
The State of Delaware's Hazardous Waste Management Branch (HWMB) recognizes the need to allow "low risk" solid wastes that are designated as hazardous because they are listed (originally contained high risk hazardous constituents) or have been mixed with, derived from, or contain listed hazardous wastes out of the RCRA Subtitle C. Currently, to gain such an exemption, the waste/facility must be processed through the delisting process which is currently implemented by EPA Region III for Delaware.

The HWMB commends EPA efforts to propose an alternative to the seemingly unworkable and lengthy delisting process. The HWIR Process Waste Rule as proposed is an approach the HWMB would consider adopting if the following concerns/modifications were addressed.

MDF10 - State of Delaware, HWMB, WHWP-00237, 3,3 State

Overall, the HWMB supports the development of an alternative to the current delisting process. However, we believe the proposal as written has many technical and implementation concerns. The HWMB would potentially consider a phased-in approach of the current proposal. We believe a phased approach would allow EPA time to address some of the remaining technical concerns and allow states to potentially become comfortable with a more self implementing approach. In addition, to assist those who review proposed rules or implement final rules, we suggest EPA attempt to flow chart the process(es) as described in the Rule. I have attached our attempt at deciphering the 125 page rule and putting it in flow chart form.

MDF11

If MDF Rules are Finalized, EPA should Identify when any Petitions Seeking Judicial Review may be Filed

MDF11 - Bethlehem Steel Corp., WH2P-00004, 10, 3 Industry

If EPA does issue the mixture and derived-from rules as final regulations, it should identify specifically when it believes that any petitions seeking judicial review of these rules may be filed. At this point, it is unclear whether the agency proposes these rules to become final independent of promulgation of the rest of the HWIR proposal.

MDF12
MDF Rules Should Have a Sunset Provision of One Year While being Revised

MDF12 - The Fertilizer Institute, WHWP-00101, 17,1 Industry Assn.
EPA's only option is to utilize the comments received in response to the December 21, 1995 Proposal to develop a new proposal. EPA is left with few options as it seeks to comply with the consent decree deadline. If it goes forward with a final rule based on this administrative record, it will almost certainly be successfully challenged and the rule vacated. If it does not promulgate a new rule, the legal effect of the mixture and derived-from rules will lapse. To address its dilemma, TFI suggests that EPA repromulgate the mixture and derived-from rules, as they currently exist, with a sunset provision of one year. With the additional time, EPA should undertake an additional round of information-gathering and publish another proposed rule. In that way, EPA can develop an appropriate administrative record and properly respond to comments received on its revised proposal.

MDF13
Exemptions are Consistent with the RCRA Statutory Language and General Principles of Administrative Law

MDF13 - Basic Acrylic Monomer Manufacturers, WH2P-00021, 4,3 Industry Assn.
Exemptions for Low Risk Wastes Are Consistent with the RCRA Statutory Language and General Principles of Administrative Law. The objective of EPA's proposed Hazardous Waste Identification Rule to exempt low risk wastes from regulation under subtitle C of RCRA is consistent with -- and indeed is favored by -- general principles of administrative law and the statutory requirements of RCRA. In the earlier 1996 comments, BAMM noted that EPA had adequate statutory and case law authority to proceed with eliminating unnecessary and burdensome waste handling requirements. Courts have long recognized that agencies have authority to exempt de minimis risks from regulation. Moreover, in a broad variety of regulatory contexts, courts have held that agencies are precluded from regulating insignificant risks unless Congress expressly directs otherwise. The specific statutory language of RCRA is consistent with the general principle of administrative law that an agency should only regulate significant risks. Section 1004(5) of RCRA defines hazardous waste as a solid waste that may significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, injury or 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) (1988) (emphasis added). Under the specific statutory requirements of RCRA and general principles of administrative law, therefore, EPA is not only authorized, but indeed is obligated, to exempt from regulation those wastes that present an insignificant risk to human health or the environment.

MDF14
LDR Treatment Should be Required of Mixture-rule Process Wastes

HWIR & MDF14 & MDF9 - Pennsylvania DEP, WHWP-00167, 3,4 State Govt.

EPA requests comments on three contingent management options identified as Options Four, Five and Six at 60 FR 66398-99. Pennsylvania supports the following concepts:

1. Pennsylvania agrees with the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) that the system used to qualify state facilities should allow states to self-certify facilities and should not follow the model used for municipal waste Subtitle D approvals. Pennsylvania supports Option 4 with the qualification that states self-certify their programs.

2. Pennsylvania also agrees with ASTSWMO that EPA should offer a finalized contingent management rule as part of this HWIR rulemaking effort. This rule should allow contingent management at qualified double-lined disposal facilities with a resulting risk not to exceed 1 E-6 and HQ 1 for mixture-rule wastes with higher concentrations than those in proposed Table A of Appendix X. Further refinements may await a more detailed future rulemaking.

3. Landfill facilities that substantially meet 40 CFR Parts 257-58 or 264 should be allowed to accept LDR treated mixture-rule wastes that do not exceed a risk level of 1 E-3 or HQ 10 (in an unregulated setting).

4. LDR treatment should be required of mixture-rule process wastes.

5. Pennsylvania also supports Option Six because we believe that the state's double-lined municipal or residual waste landfills will ensure protection up to at least the levels of 1 E-6 and HQ1. 60 FR 66399.

6. Pennsylvania believes that only those states which have broadly qualified programs should be authorized to allow contingent management of wastes posing up to 1 E-3 and HQ 10 risk levels (in an unregulated setting). States which do not have qualified programs for treatment or disposal of contingently managed wastes should not be authorized to allow exit through contingent management of wastes generated in those states because of the increased difficulties in the tracking and monitoring of successful contingent management.

7. Pennsylvania supports the use of waste analysis/waste acceptance plans for qualified facilities. Disposal of certain mixture-rule waste would only be authorized after consideration of site characteristics such as liner compatibility, leachate treatment systems and other site-specific factors. State programs would approve classes of wastes at a particular facility after review of appropriate waste analysis data.

8. Pennsylvania does not support the use of land application or surface impoundments for

mixture-rule wastes that pose a risk greater than 1 E-6 or HQ 1.

9. Pennsylvania does not at this time support the use of single-liner or unlined landfills for mixture-rule wastes that pose a risk greater than 1 E-6 or HQ 1. These options may be considered at a future time for captive sites or sites with particular hydrogeology or climate characteristics.

MDF15
EPA Should Ensure that the Federal Revisions are Applicable in Authorized States

MDF15 - Browning-Ferris Industries, WHWP-00139, 50, 2 Waste Mgmt Comp.
[...] By next November, the "mixture and derived from" rules will be revised by the HWIR rule. A number of states which "adopted" such rules did so by reference to the Federal requirements. The only logical approach to the question of modification of the RCRA rules governing the identification of hazardous waste is to provide that the Federal revisions are, pursuant to Section 3006 and the Agency's regulations, applicable in authorized states.2. The Agency's Interpretation of State Authorization Precludes Improvements To The Subtitle C Program. [...]