

US EPA ARCHIVE DOCUMENT

Appendix E: Full Text of Comments from 1995 and 1999 HWIR Proposals
On Other Possible Exemption to the Mixture and Derived-From Rules

OTH1

Exemption for GAC (granular activated carbon) from MDF Rules

OTH1 - NorthWestern Carbon, WHWP-00131, 2,1

Industry

Spent GAC usually contains one or more constituents listed in CFR 40 Part 261 (i.e.: Trichloroethylene U228 or an F waste) that the Administrator has determined will render a waste "hazardous" when present in quantities exceeding predetermined limits. The waste may be considered "non-hazardous" if the analytical data demonstrates constituent quantities below these limits UNLESS (and herein lies the problem) the waste is subject to the mixture rule [40 CFR 261.3(a)(2)(iv) ... a solid waste is a hazardous waste if it is mixed with one or more listed hazardous wastes] and/or the derived from rule [40 CFR 261.3(c)(2)(i) ... a solid waste generated from the treatment, storage or disposal of a listed hazardous waste is also a hazardous waste]. It is our experience that many, many situations occur where spent GAC filter media containing only a fraction of the EPA predetermined limit (as set forth in CFR 40 Part 261 Subpart C) of a listed constituent is needlessly classified as hazardous waste because: A) the source of the small amount of constituent is known by the generator to be a process rendering the constituent, and therefore, the spent carbon hazardous no matter what if the mixture/derived from rules must be applied, B) the source of the constituent is unknown but the constituent has been assigned a listed "hazardous waste number" in CFR 40 Part 261 Subpart D and out of fear and confusion, the generator believes that if it has a number and it is on his spent GAC in any quantity, the mixture/derived from rules apply. [Nothing positive occurs when a generator must suffer the additional liability and expense of needlessly classifying any material as "hazardous" if, indeed, it poses no threat to human health and the environment.] No one contends that Granular Activated Carbon, an organic recyclable filter media, poses any threat to the environment in and of itself. However, GAC affinity for dangerous constituents does pose potential situations that will warrant "hazardous waste" classification. For this reason, quantification limits have been established for many commonly occurring hazardous constituents and testing protocols for unquantified constituents are currently in place. Therefore, we respectfully submit: 1) that in the [narrowly defined category of spent GAC filter media], constituent origin has absolutely no significance when defining the potential hazards to humans and the environment, and 2) that conscientious employment of the existing analytical process (exclusive of the derived from/mixture rules) will simplify spent carbon waste classification, increase classification accuracy and compliance, reduce unwarranted liability exposure, and lend confidence and legitimacy to the updated classification process. Simply stated, it must be put forth in plain language that [when spent GAC is generated containing one or more listed constituents the GAC must be subjected to the existing appropriate testing protocols and the analytical data compared to predetermined EPA constituent quantitative limits. If limits are exceeded, the spent GAC received hazardous classification. If limits are not exceeded, non-hazardous classification is warranted.]

OTH2

Exemption for Wastes that are Discharged to Clean Water Act-equivalent Disposal Facilities

OTH2 - Westinghouse Electric Corp., WHWP-00177, 2,3

Industry

The EPA should consider expanding the mixture and derived-from rule exclusion to include wastes that are discharged to Clean Water Act-Equivalent disposal facilities. For example, the State of Washington incorporated soil column discharge permits into their state law. Westinghouse believes that state soil column permitting programs meet the intent of a "CWA-equivalent" system and should be considered by the EPA to be equivalent to Clean Water Act programs. This change would broaden the existing mixture and derived-from rule exclusion to other wastes.

OTH3

Concentration-based Conditional Exemption from the Mixture Rule for Wastewaters Discharged Under the CWA

OTH3 - DuPont, WHWP-00182, 4,2

Industry

DuPont strongly supports the Agency's intent to retain existing mixture and derived-from rule exemptions. DuPont strongly supports the Agency's intent to retain current exemptions, both codified and contained in policy directives, from the hazardous waste identification system particularly for mixture and derived-from wastes [eg. 40 CFR 261.3(a)(2)(iv)(A)-(E) and policy memorandums such as the "Skinner Memorandum" dated August 23, 1995] (60 FR 66349). DuPont also recommends, as a means towards achieving smarter reform for wastes which currently continue to be designated as hazardous despite being generated with constituent concentrations that pose low risks or that are treated in a manner that reduces constituent concentrations to low levels or risk, that the Agency consider expanding the scope of these existing exemptions, particularly at 40 CFR 261.3(a)(2)(iv)(A) and (B), to include other appropriate hazardous constituents listed in 40 CFR 261 Appendices VII and VIII. The burden of proof of eligibility for such an exemption would, of course, be placed upon the generator, consistent with existing regulations at 40 CFR 261.2(f). Additionally, generator's should also be able to demonstrate that the aggregation of such wastes is for the purposes of adequate, centralized treatment in a system regulated under either Section 402 or 307(b) of the CWA (i.e. is not impermissible dilution under 40 CFR 268.3). DuPont believes a concentration-based conditional exemption from the mixture rule is more appropriate than a de minimus approach because not all Appendix VII and VIII constituents are currently associated with wastes listed in 40 CFR 261.33 (i.e. value of 261.33 materials would naturally preclude other than de minimus losses). DuPont recommends that the Agency take an approach similar to that taken in establishing the existing 1 part per million and 25 part per million exemption levels for spent solvent constituents [46 FR 56584-5]. Namely, all 40 CFR 261 Appendix VII and VIII constituents determined by the Agency's Carcinogen Assessment Group to possess substantial evidence of carcinogenicity would be given a 1 part per million exemption level. Likewise, those 40 CFR 261 Appendix VII and VIII constituents lacking substantial evidence of carcinogenicity would be given a 25 part per million exemption level. DuPont reasons, given that virtually all of the subject wastewater mixtures will receive some form of treatment, that such an expansion of the mixture rule exemption would pose no substantial threat to human health or the environment. DuPont also recognizes that the Agency may be concerned by adopting such an approach it may actually encourage generators to discharge large quantities of listed hazardous wastes into wastewater treatment systems to circumvent Subtitle C management. (The Agency's concern at the time of the existing mixture rule exemption was improper management of listed hazardous wastes which are also principal wastewater streams). However, DuPont would like to point out that there are still numerous examples (eg. rinsewaters from personal protective equipment decontamination, de minimus losses during handling and transfers of listed hazardous wastes, rinsewaters from rendering containers/tanks empty, combustion unit scrubber waters, contaminated precipitation run-off from containment areas) of how, for even principal waste streams, the existing and mixture and derived-from rules create what can only be unintended results (and which will likely continue given the extremely conservative exit levels proposed in this rule). [...]

OTH4

Exemption for Subtitle D leachate and Gas Condensate for the Retroactive Application of the Derived-from Rule

OTH4 - Browning-Ferris Industries, WHWP-00139, 40,3 Waste Mgmt Co.
Management of Leachate and Gas Condensate from Municipal Landfills Containing Subsequently Listed Wastes For BFI, one of the most important issues regarding the mixture and derived from rules is their applicability at subtitle D landfills that legally receive for disposal solid waste that at some later date become a listed hazardous waste. The retroactive application of the mixture and derived from rules, under these circumstances, requires that leachate or gas condensate be managed as a hazardous waste. As a result, owner/operators are penalized because they are subject to severe regulatory burdens and costs-- particularly if they keep good records of solid wastes disposed of at their subtitle D facilities that later become listed. The mixture and derived from rules, however they are applied, are far to crude a regulatory construction to be reasonably relied upon to properly identify whether leachate and gas condensate from Subtitle D landfills are hazardous. It would be exceedingly rare that any waste stream, (particularly at a commercial Subtitle D facility that handles very large volumes of a wide variety of nonhazardous waste) would be so abundant, that it would be a major determinant of the composition of the landfills leachate or condensate. Unfortunately, the HWIR rule does not offer a practical solution to this regulatory conundrum. In fact, the HWIR rule only exacerbates the problem because of its exceedingly high exemption demonstration costs. Despite its technical sophistication, the rule fails the common sense test in providing a straightforward solution to a problem that could be solved very easily on simply policy and legal grounds. Retroactivity of the Mixture and Derived From Rules The 1989 ruling of the United States Court of Appeals for the District of Columbia Circuit in Chemical Waste Management, Inc. V. EPA held that derived from rule could be applied retroactively to leachate from Subtitle D landfills that received for disposal a solid waste that later was listed by the Agency. The court held that the mixture and derived from rules apply retroactivity even if the landfill ceases to take the waste before the effective date of the listing. Since the court's ruling EPA has not formulated a consistent policy for dealing with the issue of retroactivity. While BFI disagrees with the opinion of the court in several respects, BFI notes that the court did not bind the Agency to its interpretation of the derived from rule. Instead, the court assumed the validity of the rule, and concluded that the Agency's view was not arbitrary -- but never does the court insinuate that the Agency is somehow statutorily bound to its regulatory view. In fact, the court's reference to the Chevron doctrine strongly suggests otherwise. Id at 1536. As such, BFI believes that it is within the Agency's discretion to fix the problem caused by the retroactive application of the mixture and derived from rules. While the HWIR could theoretically be used to remove the punitive effect of the mixture and derived from rule in this context, as proposed, the HWIR rule's relief would be more costly than the stated problem. Moreover, BFI believes that the issue of retroactivity, at Subtitle D landfills receiving solid waste that later becomes listed as hazardous, can be solved on policy grounds and relying on the regulatory authorities elsewhere under subtitle of RCRA and authorities under the Clean Water Act. 3. The Mixture and Derived From Rules Shed No Light on The Physical and Chemical Make Up of Landfill Leachate Or Gas Condensate BFI strongly believes that leachate and gas condensate from Subtitle D landfills should be evaluated for treatment and disposal based on their actual physical and chemical characteristics. BFI does not believe that the mixture and derived from rules offer

any meaningful insight as to the physical and chemical make up of leachate and gas condensate. As such, neither do the mixture and derived from rules shed any light on the risks presented by leachate or gas condensate. The retroactive application of the mixture and derived from rules is an arbitrary, regulatory construction devoid of any scientific basis for meaningful characterization of leachate or gas condensate. Thus, the application of the mixture and derived from rules sheds no light on whether leachate or gas condensate pose the kinds of risks that warrant regulation as hazardous waste. Simple deductive reasoning should be sufficient to indicate as to why the application of the mixture and derived from rule sheds no light on the chemical and physical properties of leachate or gas condensate from a commercial nonhazardous landfill. For example, it is extraordinarily unlikely that a single roll off box, containing a listed hazardous waste, would have any significant effect on the chemical composition of leachate or gas condensate at a commercial landfill handling millions of tons of different waste streams over its lifetime. Given the typical volumes of waste sent to a landfill by the vast majority of generators are extremely modest relative to the balance of waste at a commercial non-hazardous landfill, it is hard to imagine, short of a monofill scenario, that even years worth of a generators shipment would lead to a single generator's waste driving the chemical make up of leachate or gas condensate. Leachate and gas condensate are not simply dilute forms of the wastes disposed of in a landfill particularly if the landfill co-disposes a variety of waste streams. Leachate and gas condensate are the products of complex chemical reactions that change over the life of a Subtitle D landfill. These changing reactions, in turn, cause changes in the physical and chemical properties of leachate and condensate over time. BFI views the HWIR rule as an extremely cumbersome tool to determine whether the mixture and derived from rules improperly identify leachate or gas condensate (from Subtitle D landfills that received solid waste that latter becomes listed) are in fact truly hazardous wastes. Deductive reasoning as outlined above negates the need for the elaborate and prohibitively expensive HWIR approach. Responsible Owner/Operators are Penalized by the Mixture and Derived From Rules The owner/operator of a Subtitle D landfill has no means of predicting, in a reliable or timely fashion, which of the nonhazardous waste streams that they are receiving for disposal may later become a listed hazardous waste. BFI believes that the retroactive application of the mixture and derived from rules unduly penalizes those owner/operators that: - Operate large scale Subtitle D landfills that receive for disposal a variety of nonhazardous waste streams. - Have waste acceptance procedures that provide a record keeping trail of the nature and amounts of wastes received which provides proof that they received a waste for disposal that subsequently becomes listed; - Actively manage their leachate for either treatment or recirculation; and, - Install gas recovery systems that generate condensate which is actively managed for treatment or recirculation. - Cease taking a listed hazardous waste before the effective date of the listing. Owner/operators are essentially penalized because the leachate and condensate for these facilities must be managed as hazardous waste. Thus, the owner operator faces dramatic increases in the costs of treatment and disposal and significant transactional costs that may be incurred if circumstances require them to obtain and maintain Subtitle C permits. In addition, these owner/operators also face the stigma being a generator of a hazardous waste in their community which can jeopardize the owner/operators solid waste permit. Regulatory Problems And Associated Costs Caused By Retroactive Application of the Mixture and Derived from Rules: BFI notes that for most Subtitle D landfills that manage their leachate, POTWs offer the most cost-effective treatment option. On-site treatment systems are expensive to build and operate over the lifetime of the disposal facility because the volume of leachate flow varies seasonally and over

the life of the facility. Generally, POTWs are better able to efficiently handle short and long-term variations in leachate flow because they tend to treat larger volumes of wastewater from multiple sources. Most Publicly Owned Treatment Works (POTWs) fearing legal or political liabilities will not allow the discharge of hazardous waste or groundwater contaminated with listed hazardous waste into their sewerage system. They refuse to do so even though pretreatment regulations (see 40 CFR 122 and 403) govern these discharges and the domestic sewage exclusion also applies under 40 CFR Part 261.4(a)(ii). POTWs routinely disallow the discharge of easily treated wastewater contaminated with hazardous waste generated from CERCLA remedial activity despite the domestic sewage exclusion would allow them to do so without invoking extra regulatory obligations. In fact, in an attempt to overcome the liability concerns of POTW operators, the Agency's Office of Solid Waste and Emergency Response has published a guidance manual entitled "Discharge of Wastewater from CERCLA Sites into Publicly Owned Treatment Works (POTWs)." Nevertheless, this guidance manual rarely convinces POTW operators to take and accept hazardous wastewaters for treatment. More understandably, there are very few POTWs that will accept a listed hazardous waste via tanker truck. This is so because domestic sewage exclusion does not apply, and as a result, POTWs are subject to extra permit burdens and increased costs of managing their solids (solids would automatically become listed hazardous waste due to the derived from rule). If a facility cannot place its leachate or condensate with a POTW, then the owner/operator has to either build a facility on-site at a cost of several million dollars, or truck the waste to a hazardous waste treatment facility where the costs of transport and treatment can be excessively high. However, building an on-site treatment facility is not always a guaranteed option if there is no place to discharge the treated effluent. If a Clean Water Act permit is not obtainable due to lack of a discharge point, the owner/operator would have to seek a Subtitle C treatment permit. The Agency is fully aware that obtaining a Subtitle C permit is both expensive to obtain and maintain, and can create a variety of additional regulatory problems. For example, having to get a Subtitle C permit would require the expense of evaluating all operating and closed disposal units at the facility for purposes of determining whether corrective action is necessary. Beyond the technical and regulatory aspects of having to manage leachate and gas condensate as hazardous, there is the stigma and associated high transactional costs that arise when dealing with the public. Trying to explain to the public, why an otherwise nonhazardous landfill, is generating a leachate which is hazardous because of the retroactive application of the derived from rule would be a difficult task that could lead to permit problems that could carry over to the facility's Subtitle D permit. BFI is concerned that sometimes this could lead to premature closure of a landfill or the inability to carry out capacity expansions. Retroactivity is Not an Academic Problem -- Future Listings are Inevitable Because there is no way for a facility to predict what wastes will become listed at a future date BFI believes that the Agency should exempt subtitle D leachate and gas condensate outright from the retroactive application of the derived from rule. Alternatively, it could take action to appropriately restrict the retroactive application of the derived from rule. BFI believes that this approach is fair for subtitle D landfills that will cease to take the waste once it becomes listed. Because the Agency is under a strict schedule to make a series of listing determinations over the next several years the issue of retroactivity is not academic but one of significant practical consequence. BFI notes that until the Agency makes a final determination on a listing, there is no way to predict reliably when a particular solid waste will become a future listed hazardous waste. Few landfills in operation before 1980, accepting industrial or commercial waste, could claim that they never received and disposed of a solid

waste that was subsequently listed. The reason most nonhazardous landfills from that era do not manage their leachate/gas condensate as hazardous is that most owner operators do not have records of what wastes they took and few are aware of the mixture and derived from rules let alone their retroactive applicability. The retroactive issue raises serious competitive issues within the subtitle D disposal industry because some companies, such as BFI, require that nonhazardous industrial wastes are qualified for disposal through waste acceptance programs that are designed to keep hazardous waste out of their landfills. As a result, companies that qualify incoming industrial waste streams set up a paper trail that documents the receipt of waste that later could become listed hazardous waste. Thus, companies that are acting responsibly, implementing waste acceptance programs can be penalized later by having to manage their leachate and gas condensate as a hazardous waste. This would create extra costs that competitors, without waste acceptance programs, would not have to shoulder. Preferred Non HWIR Options for Leachate and Gas Condensate Below, BFI offers two specific options that the Agency could undertake to deal with the retroactivity problem in a way that will fully address issues of environmental protection. BFI notes that these options, conceptually, are fully consistent with the recently enacted Land Disposal Program Flexibility Act of 1996. These options would not apply to monofills. Of course, these options would not apply to landfills that wish to continue to take a solid waste once the particular waste becomes a listed hazardous waste. Option I: Exempt leachate and gas condensate from nonhazardous subtitle D landfills from the retroactive application of the mixture and derived from rules provided that their leachate is treated at a facility permitted under the CWA. Solid residues would be treated as newly generated wastes and evaluated for characteristics. In addition, allow for case-by-case exemptions from the mixture and derived from rules where subtitle D landfills received a listed hazardous waste for disposal because of misrepresentation by the generator, treater or transporter. The case-by-case determination would factor in the volume of the listed waste relative to the size of landfill and its actual effect on the landfill's leachate, and also the practicality of excavating the listed waste. Leachate and gas condensate from landfills that have ground water monitoring systems, and are subject to corrective action and financial assurance requirements would be automatically exempt from the mixture and derived from rules. Option II: Extend the domestic sewage exclusion to trucked or railed leachate/condensate from (that will be destined for treatment at a POTW or private treatment work permitted under the CWA) nonhazardous subtitle D landfills from the retroactive application of the mixture and derived from rules. In addition, allow for the same case-by-case exemption as in Option I. Both Options I and II result in treatment of leachate and gas condensate under an NPDES pretreatment or direct discharge permit. Moreover, under the NPDES program the treatment technology would be similar or identical to RCRA BDAT under the land ban. In addition, the NPDES program has prohibitions on pass through of untreated constituents for both pretreatment and direct discharge scenarios. The solids would still be subject to evaluation for a characteristics to determine their ultimate management just as they are today for solids coming from a POTW when the hazardous wastes are sewerred rather than transported. Using the characteristics to identify the residual solids is certainly a better means of evaluating a waste in this context [than] the mindless application of the mixture and derived from rules. Because of the need to keep hazardous waste out of Subtitle D landfills companies, such as BFI, operate extensive waste acceptance programs that document a waste as being non hazardous. This documentation creates a paper trail such that when a solid waste later becomes listed the landfill can be subject to enforcement action if the landfills leachate and gas condensate is actively managed.

OTH4 - Waste Management, WH2P-00006, 1,2 Waste Mgmt Co.

EPA should use the opportunity of the amendment of the mixture rule and derived from rule to resolve an outstanding and ongoing issue regarding leachate from municipal waste landfills. a. On three separate occasions. EPA has had to address the issue of the impact of new listings on MSW landfills that may have disposed of the newly listed wastes prior to their designation as a hazardous waste. On February 9, 1999, EPA promulgated the final regulations, Identification and Listing of Hazardous Waste, Petroleum Refining and Process Wastes. In that rule, EPA deferred the application of the derived from rule to potentially affected MSW landfill leachate if the leachate were recirculated to the landfill or if the leachate were stored in tanks and/or ultimately transported to a Publicly Owned Treatment Works (POTW). Surface impoundments containing the affected leachate were given two years to cease operations. EPA's primary basis for the deferral was a desired integration of CWA and RCRA requirements with the understanding that the leachate would be adequately managed in a POTW. EPA later proposed, at 64 FR 40198, a new listing for wastes from the pigment and dye industries, and at 64 FR 46475, a new listing for wastes from the chlorinated aliphatics industry. In both of these proposed listings, EPA again deferred application of the derived from rule to MSW landfill leachate under the same conditions, but the underlying basis for each deferral was different. In the case of the proposed listings for the pigment and dye industry, EPA employed a concentration-based approach, which significantly complicates the determination regarding the leachate because it requires knowledge and records of having received the precise waste stream that is to be listed, and also records of the precise concentration of contaminants of concern. EPA did not believe that such records were likely to exist, but if any records were to be found indicating concentrations in excess of the standards, a MSW landfill could take advantage of the same deferral applied to the Petroleum Refinery Wastes. In the proposed listing for chlorinated aliphatics waste, EPA employs a third approach by granting a conditional exemption for MSW landfill leachate based on risk from land disposal.

b. The various means used by EPA to defer application of the derived from rule to MSW landfill leachate, although providing appropriate relief, also create great uncertainty for landfill operators with each new listing over leachate management costs. As EPA continues to list hazardous waste, landfill operators will not know whether past, legitimate disposal of industrial wastes will lead to dramatic increases in the cost of managing leachate. This increase will occur regardless of any environmental concern with the existing management of the leachate pursuant to CWA requirements, but will solely be a function of application of the derived from principle. In its comments to EPA regarding the listing of Petroleum Refinery Wastes, WM provided considerable information on the volumes of leachate and costs associated with its management as a hazardous waste. A copy of those comments are attached, but to summarize, for just one set of landfills affected by one hazardous waste stream, costs were expected to exceed \$10 million per year, without any discernible improvement in environmental protection. Such costs cannot be reasonably anticipated because the landfill operator would not know until the final listing whether a particular industrial waste stream will predicate direct application of the derived from rule, or whether concentrations of contaminants in the waste stream, or a generic risk assessment will preclude application of the derived from rule. The only recourse for the landfill operator would be to forgo receiving any new industrial wastes (although any past disposal practices may create potential liability). However, MSW landfills, due to the stringent management standards of RCRA Subtitle D, very often present the most environmentally protective option for non-hazardous industrial

waste generators. With the recent release of EPA's Guidance on Industrial Waste Management, EPA should expect that more industrial waste generators would seek out the standards of protection available at MSW landfills. It would be unfortunate if the availability of the MSW landfill option were limited or eliminated by a concern, no matter how remote, with exorbitant leachate management costs as a result of blind application of the derived from rule. 2. The Promulgation of Effluent Guidelines (EG) for MSW Landfill leachate allows EPA to proceed with an exemption of MSW landfill leachate from the derived from rule. a. EPA has acknowledged its interest in integrating the RCRA and CWA standards to avoid unnecessary duplication and to be consistent with the requirements of RCRA 1006(b)(1). In the Petroleum Refinery Waste listing, EPA acknowledged that CWA Effluent Guidelines had been proposed for MSW (and other) leachates, and that proposal stated that: ... EPA did not propose pretreatment standards for Subtitle D landfill wastewaters sent to POTWs because the Agency's information indicated that such standards were not required due to several factors, including 1) raw leachate were below published biological inhibition levels, and 2) other information indicated a lack of pass-through of toxics...EPA's concern is that what appears to be a proper and reasonable means of managing leachate would be undermined if the leachate becomes a hazardous waste. b. In the EG Rule, EPA has acknowledged the anomaly of a derived from hazardous leachate being subject to the effluent limitation for the Non-Hazardous subcategory. However, EPA stated that: ...due to pollutant specific and site-specific factors in these types of situations, EPA determined that the local permit writer may need to require monitoring of pollutants in addition to those required by this rule for the Non-Hazardous subcategory in order to ensure appropriate treatment of the hazardous Subtitle C leachate. But EPA goes on to say that: Since the majority of Subtitle D Landfills discharge directly to POTWs, and since EPA did not establish pretreatment standards for either non-hazardous or hazardous constituents, the local authority will not need to make the determination in these cases. In short, EPA has determined that leachate managed in POTWs, even those with hazardous leachate under the derived from rule, do not require special monitoring or management standards. For those direct discharges, the local authority can determine, based on the nature of the leachate, whether additional parameters need to be limited and monitored. As a result, any management of a derived from leachate pursuant to RCRA requirements would be a straightforward duplication of the CWA effluent guidelines. 3. Waste Management recommends that EPA amend the derived from rule to exempt from its application leachate from MSW landfills that is managed in accordance with 40 CFR Parts 136 and 145, Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Landfills Point Source Category. The exemption would eliminate an unnecessary duplication of RCRA and CWA requirements, eliminate uncertainty over potential liabilities associated with non-hazardous industrial waste disposal, and preserve reasonable costs for leachate management at MSW landfills.

OTH5

Exemption for Personal Protective Equipment Associated with Waste that was Identified as Hazardous Waste Solely Because of the MDF Rule

OTH5 - DOE, WHWP-00072, 47,1 Federal Govt.

p. 66386, col. 1 -- EPA states that one of the requirements that must be met in order to make an effective claim is that the waste must be sampled in accordance with a comprehensive sampling and analysis plan. As guidance, EPA recommends using the basic elements of sampling and analysis plans described in "Chapters One and Nine of SW-846." Pursuant to the mixture and derived-from rules, personal protective equipment (PPE) that has the potential of having been in contact with listed waste during its use is commonly managed as listed waste. Under current practices, this type of discarded PPE is typically managed as listed waste bearing the same hazardous codes as the original listed waste (potentially contaminating the PPE). DOE is concerned that the guidance in SW-846 (referenced in the preamble) is not readily applicable to debris such as PPE. Due to the nonhomogeneous nature of PPE, sampling techniques likely are inadequate to verify that exit criteria have been achieved for each piece of PPE. Because the representative sampling techniques utilized may be in question and the cost of sampling each piece is prohibitive, it is unlikely that the proposed rule will allow PPE to exit Subtitle C regulations. DOE is concerned that unless the rule is modified, this low-risk waste will continue to be overregulated. To correct this overregulation, DOE suggests that EPA consider adopting as part of the HWIR one of the following approaches: (1) Amend 40 CFR 261.3 by adding paragraph 261.3(a)(2)(vi) to read as follows:(a) *(2) *(vi) Personal protective equipment is a hazardous waste only if it exhibits the characteristics of hazardous waste identified in Subpart C; or(2) Amend 40 CFR 261.3 by adding paragraph 261.3 (a)(2)(vi) to read as follows:(a) *(2) *(vi) Personal protective equipment worn when handling hazardous waste listed solely because of the mixture and derived from rule and that does not exhibit the characteristics of hazardous waste is not a hazardous waste.[NOTE: This approach chooses an exit point for PPE based on the type of waste with which the PPE was associated. Specifically, PPE associated with waste that was identified as hazardous waste solely because of the mixture and derived-from rule should be exempted from Subtitle C regulations. The rationale for this exemption request is that the matrix and concentration of hazardous constituents of the "mixture and derived-from" waste are no longer the same as those of the original waste upon which EPA based its decision to list the waste. Therefore, PPE used when handling mixture and derived-from waste has an even more remote chance of posing a threat to health or the environment than does PPE used when handling listed waste that has not been mixed with another material.] (3) Include a specific exclusion for radioactive PPE in the upcoming supplemental proposal on HWIR mixed waste exit criteria (referred to at 60 FR 66401, col. 1). This exclusion request is based on the low potential for significant hazardous waste contamination of PPE worn when handling hazardous waste, coupled with the added protection of management of the PPE in accordance with AEA requirements (which control the releases of and exposure to radioactive hazards).

OTH6

Expand the Mixture Exemption for Used Oil to Include Antifreeze

OTH6 - Lenz Oil Service, Inc., WHWP-00019, 1,1 Waste Mgmt, Co.

The proposed HWIR has been greatly anticipated and is an idea whose time is badly overdue. Unfortunately for those [of] us in the regulated community hoping for some common sense rules to allow us to recycle certain wastes, this proposed rule falls much too short. We were hoping for a rule that would allow recycling of some low risk wastes as non hazardous that are currently regulated as hazardous under the characteristic rules. Wastes when recycled are subject to the same tests to determine if they are hazardous wastes as wastes that are landfilled. The characteristic tests for toxicity were developed for the hazards associated with landfilling wastes. Therefore, wastes that are recycled can be considered hazardous wastes even if they are actually no more "hazardous" to handle, recycle or use in place of virgin products, than their virgin counterparts. The only occasion that this problem has been recognized and dealt with was with the recently enacted used oil recycling regulations. These regulations allow recyclers to recycle or reuse the oil as a non hazardous waste even though that waste may fail such elements as lead/benzene by TCLP analysis. Many other wastes exist that could be recycled for reuse or used in place of virgin products and are no more hazardous to handle, than their virgin counterparts. That is one reason why our company and our industry association (The National Oil Recyclers Association) feels the mixture rule for used oil should remain as it was originally written and enacted. This was a start at taking recycled wastes out from under the landfill regulations. The 140 degrees f ignitable hazardous waste trigger was adopted due to the hazards of landfilling waste with a flashpoint of under 140 degrees f. Obviously re-refining, or reprocessing used oil for fuel does not incur a substantial risk when handling oil between 100 and 140 degrees f flashpoint. That is why the used oil fuel specifications were set at 100 degrees f, not 140 degrees f. Our company processes used oil into industrial fuel. When fuel blending the oil we are required to purchase virgin distillates to blend into the mixture to lower the viscosity for some customers. It makes no sense for us to have to buy virgin products to blend with, if wastes are available that are no more hazardous to handle or burn than their virgin counterparts. The used oil mixture rule removed the ignitability issue, as we feel it should be. After all the virgin distillates we buy are "ignitable" also, obviously we want them to be. Along this same line of thinking it makes no sense that a waste that is no more hazardous by toxicity, reactivity or corrosiveness to recycle, handle or use as a replacement for a virgin substitute, be required to be handled much more strictly than its virgin substitutes. We have processes and markets to recycle petroleum solvents (for reuse or for fuel cutter stock) and used automotive antifreeze (for reuse). However the current regulatory scheme, to recycle these wastes under the TCLP toxicity landfill tests, makes this very difficult and expensive. RCRA characteristic tests were made to measure landfill hazards, not recycling hazards. Clearly the landfill regulations are inappropriate for recycled liquid wastes. These regulations were not promulgated to encourage recycling. For instance waste solvent if containing 1 ppm of benzene is considered a hazardous waste when recycled. However used crankcase oil often has more benzene in it than that. Virgin #2 fuel oil has over 30 ppm of benzene in it and anyone can handle it, and is not regulated for the most part. We agree that benzene is hazardous if leaching in a landfill, but it is not hazardous if being recycled, or used as a fuel at these levels. Also used solvent is lower in sulfur levels than some virgin fuels (if burned). As you can see waste solvent is actually

"cleaner" than even virgin #2 fuel oil in some areas, but yet must be handled as a "hazardous waste" when recycled. We realize that some at EPA feel that burning solvents for energy recovery is not the best practice for its re-use. However we feel [it's] EPA's job to protect the environment and recommend safe recycling techniques. But [it's] not EPA's job to disallow recycling procedures that do not harm the environment, just because they are not as "preferred" as another, by whoever happens to be running EPA at the time. After all solvents and used oil come from the same source and the same refiners cracking tower. Used oil and used solvent are virtually chemically identical. Burning used oil is happening because this procedure has the best economic value to the recycler and to the generators. Burning a lower value solvent fits into the same category. Greater than 100 degrees f flash point solvent is almost identical in its chemical make-up to distillate fuel oils. Some say that this practice of mixture is against the "premise of recycling". Why? Why can't you mix two practically identical petroleum products together for their energy recovery? - This is the lowest total cost disposal/recycling procedure for many generators. - No environmental harm is done by burning this mixture. - The "fuel" directly replaces virgin fuel that would otherwise be used, conserving virgin fuel oil supplies at practically one to one ratio. - It's actually going to lower the overall contaminant levels in the "fuel" over straight used oil. - It may actually lower vehicle fuel consumption overall due to one pick-up by an oil recycler verses a second pick-up for a small separate amount of solvent by a hazardous waste company. - Fuel blending can be performed all in a local area, pick-up, processing and end usage. Handling solvent separately as a hazardous waste requires it to go to a hazardous waste facility. Hazardous waste refining facilities are far and few between. Requiring this solvent to go to a hazardous waste facility increases the miles traveled on the roads, fuel consumption and the chances of an accident or spill. The more rural sparsely inhabited areas of the country with urban centers, even if quite large being far apart from each other, may not be economically justifiable for a hazardous waste treatment facility location. This is due to the costs involved in setting up and operating such a facility. What do those generators do with their solvent? They pay very high prices for disposal, and that encourages improper disposal. There are also markets available to us to do simple filtering and blending, or even simple vacuum distillation to re-use this solvent. These are procedures, which if could be [performed] without the "hazardous waste" tag attached to the waste, could be completed at a very low cost to the generator. This waste would also have a value if it did not carry the hazards tag, it would be viewed as a valuable commodity to recyclers. As stated waste solvent with flash points >100 degrees f are no more hazardous to handle than used oil or virgin solvents or fuels and should not be considered a hazardous waste when recycled. Automotive antifreeze can be chemically treated and be re-used as antifreeze again or distilled into pure ethylene glycol again. However each given batch could pass or fail the TCLP tests, making it impossible to universally, handle as a non hazardous waste. Again, we have markets for this product/waste but the TCLP landfill tests are stopping us from recycling this waste in a lower cost fashion as a non hazardous waste. Used antifreeze contains no more [contaminants] than used oil, which we currently handle. Actually used antifreeze is quite a bit less contaminated than used oil, and when contamination occurs it will most likely be the same [contaminants] as found in used oil (chlorinated solvents and possibly lead). Primarily, the [contaminants] causing used antifreeze to fail TCLP has been lead. Lead levels over the TCLP regulatory limit have been found in antifreeze. Benzene, perchloroethylene and tetrachloroethylene at levels over TCLP limits have also been found in used antifreeze. If this material were landfilled it could be "hazardous", but is not if properly recycled. Generators of used antifreeze (businesses and homeowners) need an easy,

inexpensive way to dispose of their antifreeze, and making recycling facilities handle antifreeze as a hazardous waste or requiring even a one time full TCLP test for smaller quantity generators, becomes very complicated and very expensive to the generator. This encourages improper disposal by generators. Smaller quantity automotive type generators need relief from this expense to get near full compliance with the regulations, as obviously do the homeowners. One cannot expect an auto dealer or service facility to do expensive lab tests for lead, etc. on every small shipment of antifreeze they generate. And handling it all as hazardous waste is definitely not "the answer". Currently generators of antifreeze (Businesses and Homeowners) in cities that do not allow sewer disposal of antifreeze, and generators in rural areas not on a sewer system of any kind have very limited options of what to do with it. From an informal survey we have done over the last couple of years many of these generators are improperly disposing of their antifreeze in their general refuse or by dumping it on the ground or into septic systems. They really may have little choice. There is only one company in Illinois that has a collection system set up that will take used antifreeze (Safety Kleen), and unless they are getting the generators used oil or renting the generator parts washing machines they are very expensive concerning antifreeze disposal, plus they do not have any plan for collection of homeowners antifreeze. In addition there are a lot of companies that refuse to deal with Safety Kleen, and they really do deserve a choice. We feel other used oil recyclers could be that choice. If antifreeze is required to be handled as a hazardous waste and/or full TCLP testing is required, competition to recycle it will never materialize, and the threat of our ground water and drinking water from improper disposal will continue. As stated there are companies out there that want used antifreeze to recycle. It can be filtered and treated for re-use as automotive antifreeze or distilled out into pure ethylene glycol again. We can sell it. We view it as a valuable commodity. There is ALOT of interest by business generators, homeowners and county and city health departments concerning antifreeze recycling. Currently our industry has had to tell these groups our hands are tied. Requiring laboratory testing on every pick-up or handling antifreeze as a hazardous waste puts the costs out of sight. If we want to get antifreeze recycling off the ground we must be able to determine in the field if a given batch of antifreeze is suitable for recycling as a non hazardous waste, without upfront expensive laboratory tests prior to every pick-up. After all, antifreeze generation is only 5 to 10% of the volume of used oil generated in the automotive sector. It is a relatively low volume waste in comparison. We do realize these wastes need some regulation. We feel the used oil recycling management standards are very adequate for the wastes we've mentioned above. If a facility is adequate for used oil storage, it is very adequate for short term antifreeze and solvent storage. Antifreeze is much less of a threat to human health and the environment if spilled or mishandled than used oil, it is readily biodegradable. Overall [contaminant] levels are typically lower than used oil in both used antifreeze and used solvent. We have also developed Waste Characterization and Analysis Plans for these wastes that generally follow the used oil procedures. (sample enclosed). These are just two examples of wastes that could benefit from a more common sense approach to regulation. Our industry hoped the HWIR would address these problems and hope EPA will consider expanding the HWIR to include some recycled liquid wastes such as these. Allowing recycling of these wastes as non hazardous wastes would give these wastes value. Value would give these wastes recycling markets.

EPA Should Adopt Best Management Standards for Used Antifreeze

[EPA] possesses the authority to take into account a waste's risk due to the manner in which it is managed and concomitantly for adopting best management standards. As properly managed and disposed used antifreeze does not present a serious risk to human health and the environment, and the likelihood of mismanaging it can be eliminated or significantly reduced by adoption of best management standards, NARSA encourages EPA to implement such an approach.

A. Non-Hazardousness and General Non-Toxicity of Used Antifreeze

NARSA firmly supports the position advocated by various groups that used antifreeze does not exhibit hazardous characteristics, especially when it is removed from vehicles by professionals following best management practices. There is much evidence that used antifreeze generally fails to exhibit hazardous qualities, as discussed below.

1. Cross-Contamination

When proper materials management standards are exercised, used antifreeze drained directly from an automobile will not exhibit the hazardous waste characteristic of toxicity by exceeding established lead levels under the Toxicity Characteristic Leaching Procedure ("TCLP"). If a draining exhibits a toxicity characteristic, it results from improper management standards, and even then, the level of toxicity registers at extremely low levels.

Any tetrachloroethylene or benzene contamination of used antifreeze at TCLP levels results from cross-contamination or represents an artifact of the TCLP analytical procedure. The State of New Jersey, specifically its Department of Environmental Protection and Energy, recently adopted in 1994 the Position on the Management of Used Antifreeze. The New Jersey Department of Environmental Protection and Energy's Hazardous Waste Regulation Program partly based their position on the Dames and Moore Waste Antifreeze Study. The Study concluded that:

The results of the antifreeze analyses indicate that antifreeze collected directly from automobiles lacks the characteristics of a hazardous waste. Constituents of concern previously identified in samples of antifreeze likely originate from poor materials management practices, contact with contaminated collection and storage vessels, or transport vehicles. Based on the results of this study, when properly managed, and kept separate from other wastes, used antifreeze does not exhibit the characteristics of a RCRA hazardous waste.

In response to the Study, the Position on the Management of Used Antifreeze recommended the use of management practices for the handling and storing of used antifreeze as the best way to minimize cross-contamination. The Position on the Management of Used Antifreeze concluded that, "Practicing these [recommend] handling and storage procedures should eliminate the need for generators to test their used antifreeze for TCLP characteristics".

2. Presence Of Lead Diminishing Over Time

Used antifreeze, especially when handled and stored using proper management standards, rarely exhibits lead levels above the Toxicity Characteristic Leaching Procedure (TCLP) regulatory level. Continued changes in radiator technology further decrease the possibility of lead contamination in used antifreeze. Any presence of lead will diminish over time as radiators without lead solder become the norm in the automobile industry. Currently, the majority of new cars and light trucks possess radiators without lead solder. As EPA itself noted, "This industry trend may reduce, if not eliminate, the issue of contaminated engine coolant and disposal as a hazardous waste". See Comprehensive Guideline for Procurement of Products Containing Recovered Materials.

3. Analysis of Accumulated Antifreeze Is Not Likely To Exhibit Any Of The Hazardous Waste Characteristic

After performing antifreeze drainings, generators of used antifreeze usually store the removed antifreeze in containers or tanks. Recent studies, such as those conducted by Valvoline, indicate that analyses of used antifreeze accumulated in storage in tanks or containers typically exhibit significantly lower toxicity characteristics than analyses of individual radiator drainings.

In fact, Valvoline's tested samples collected from its used antifreeze storage containers and tanks at 96 separate and regionally representative locations. The analyses performed demonstrated that used antifreeze, when accumulated in the tank, fails to exhibit any of the characteristics of hazardous wastes.

B. Recommendation

As demonstrated, properly managed and disposed used antifreeze does not present a serious risk to human health and the environment. As the likelihood of mismanaging used antifreeze can be eliminated or significantly reduced by adoption of best management standards, NARSA encourages EPA to implement the following management standards:

1. Collection

In order to minimize the risk of contamination, used antifreeze should be collected using only dedicated equipment (such as drain pans, funnels, transfer buckets, etc.).

After being drained from a vehicle, used antifreeze should be transferred immediately to a dedicated storage container, such as storage drums or tanks.

When cleaning antifreeze collection equipment, do not use chlorinated solvents or any solvent that is potentially hazardous. It is recommended that generators refrain from using chlorinated or listed hazardous solvents for any purpose; and that no chlorinated or listed hazardous solvents be on site.

To prevent potential contamination of collected antifreeze, generators should be educated as to the need for keeping collected used antifreeze free from exposure to petroleum wastes, cleaning solvents, and other potentially solvent-containing materials.

2. Storage Prior to Collection

Used antifreeze should be stored in a separate container reserved exclusively for used antifreeze. Care should be taken to ensure that the drum or other container is not lined with paint, resin, or other materials that could contaminate the used antifreeze. If contamination is suspected, the container should be replaced, thoroughly cleaned with a detergent, or fitted with a plastic liner.

The container should be in good condition with no leaks and a lid that can be secured to keep out rain water and other contaminants. The container should be closed at all times except when emptying or filling.

The used antifreeze storage container, such as a plastic drum, should be clearly labeled and marked USED ANTIFREEZE in order to minimize the risk of accidental contamination. The labelling should indicate that only used antifreeze should be allowed to enter the collection container.

Access to the used antifreeze storage container should be restricted to facility employees or other authorized personnel. If located outside the building, it should be locked or otherwise protected from unauthorized use.

3. Other Generator Management Considerations

Mixing used antifreeze with used oil prior to collection for recycling is strongly discouraged.

Mixing used antifreeze with other shop materials should not be permitted.

A generator should have an adequate spill avoidance and emergency response plan that accommodates the used antifreeze collection and storage method utilized on-site.

These management practices must be conspicuously posted at the collection container, and at each work station where used antifreeze may be collected.

NARSA supports EPA's inclusion of a contingent management approach in the HWIR and firmly urges the Agency to adopt such an approach in the final rule. The contingent management approach is legally sound and allows management requirements to parallel more closely the risk actually posed by a waste and the particular management scenario. NARSA also agrees with EPA that certain wastes which might be considered hazardous, if managed in an uncontrolled manner, should be considered non-hazardous and outside Subtitle C Regulations if managed in a sufficiently controlled manner that is protective of human health and the environment. NARSA believes adoption of the contingent management approach for used antifreeze discussed above accomplishes this objective.

NARSA also emphasizes that concentration based exit levels established by examining a given mismanagement scenario should not be applied to wastes, such as used antifreeze, that are

managed properly. In establishing HWIR exit levels for wastes managed according to contingent management practices, NARSA encourages EPA to follow the Agency's own suggestions by establishing higher exit levels.

OTH7

EPA Should Identify Wastes and Waste Management Scenarios Appropriate for Exclusion from the MDF Rules

OTH7 - SOCMA, WH2P-00035, 1,3 Industry Assn.

[...] SOCMA recommends that EPA pursue broader development of Subtitle D contingent management options. SOCMA recommends that EPA identify additional categories of wastes for exemption from application of the mixture and derived-from rules. SOCMA recommends that EPA consider broader development of a concentration-based listing approach. SOCMA recommends that EPA pursue a contingent management option for qualified off-site wastewater treatment. SOCMA recommends that EPA pursue contingent management options that promote qualified recycling activities. [...]

OTH7 - Phillips Petroleum Co., WH2P-00014, 2, 2 Industry

[...] Phillips urges EPA to seek alternative ways to provide regulatory relief from the overbreadth of the mixture and derived-from rules that are based on a combination of low levels of toxicity and the way wastes are managed. Phillips also believes that listing decisions themselves should be conditional, targeting wastes only when managed in ways that are demonstrably unprotective to human health and the environment. Current across-the-board listings continue to promote a "one size fits all" approach, penalizing those who would employ other equally protective waste management approaches. Fixing the overbreadth in this manner could remove significant regulatory burdens while protecting human health and the environment.

MDF9 & OTH7 - Jersey Central P&L Co., 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. [...]

OTH7 - SOCMA, WH2P-00035, 6,2 Industry Assn.

Consequently, SOCMA urges EPA to focus more resources on other alternatives that have greater potential to provide regulatory relief in the near term. For example, in a number of recent rulemakings, the Agency has applied several approaches, such as concentration-based listings and contingent management options, which could and should be more broadly developed and applied to provide relief from the mixture and derived-from rules. SOCMA also recommends that EPA develop other types of tailored regulatory exclusions targeted to particular categories of wastes that warrant exemption from automatic regulation under the mixture and derived-from rules. [...]

OTH7 - Occidental Chemical Corp., WH2P-00046, 2,4 Industry

Over the past year, CMA has come to realize that the large and unproductive effort that EPA has

made to establish a concentration-based exit system for hazardous waste indicates that a concentration-based exit system is too complicated. Instead, CMA believes that EPA should address the overbreadth of the mixture and derived-from rules in a different way. Rather than determining 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 it is managed. EPA has been excluding wastes from regulation contingent on its 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). OxyChem and OVLP, as members of CMA therefore urge EPA to seek alternative ways to provide regulatory relief from the overbreadth of the mixture and derived-from rules that are based on a combination of low levels of toxicity and the way it is managed. Fixing the overbreadth in this manner could remove significant regulatory burdens while protecting human health and the environment.

OTH7 - CMA, WH2P-00033, 4,2 Industry Assn.

[...] Over the past year, CMA has come to realize that the large and unproductive effort that EPA has made to establish a concentration-based exit system for hazardous waste indicates that the Agency's approach for a concentration-based exit system is too complicated and not implementable. CMA believes that EPA should, instead, address the overbreadth of the mixture and derived-from rules in a different way. Rather than determining 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 it is managed. EPA has been excluding listed wastes from regulation contingent on its proper management nearly since the inception of the program. For example, EPA has excluded: mixtures of certain solvents should not be regulated as a hazardous waste if they are 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), releases of de minimis quantities of certain listed wastes if they are properly managed 40 C.F.R. § 261.3(a)(2)(iv)(D), combustion waste derived residues if it meets certain health-based limits See 40 C.F.R. §266.112, Appendix VII.; treatment residues derived from the aggressive biological treatment of petroleum refinery wastewaters See 40 C.F.R. § 261.31 (F037 listing). CMA therefore urges EPA to seek alternative ways to provide regulatory relief from the over breadth of the mixture and derived-from rules that is based on a combination of low levels of toxicity and the way it is managed. Fixing the overbreadth in this manner could remove significant regulatory burdens while protecting human health and the environment.

OTH7 - SOCMA, WH2P-00035, 7,1 Industry Assn

At this juncture, SOCMA recommends that EPA dedicate resources to a new set of regulatory initiatives to identify types of wastes and waste management scenarios appropriate from exclusion from the mixture and derived-from rules. These initiatives should encompass a range of different

approaches, including exclusion based on contingent management, recycling or reuse scenarios, or upon recognition that the waste at issue is sufficiently different from the listed waste as to no longer warrant automatic application of a waste code under the mixture and derived-from rules. SOCMA would be pleased to work with the Agency on the development and refinement of these various approaches.

OTH7 - SOCMA, WH2P-00035, 13,5 Industry Assn.

[...] If EPA is serious about its commitment to tailor the hazardous waste program to focus more effectively on higher risk wastes, then it cannot accomplish this task with the approach currently set out in the HWIR Proposal. EPA needs to consider a range of additional regulatory initiatives in order to provide much-needed substantive regulatory relief to the regulated community and accomplish its own stated policy objectives. SOCMA urges the Agency to step back and think more broadly about other alternatives that would better address the impact of the mixture and derived-from rules. SOCMA recommends that EPA consider both focused regulatory carve-outs for specific types of wastes and contingent management carve-outs that would promote not only sound waste management practices but also promote increased recycling and reuse of secondary materials in order to minimize the volume of materials that must be managed as waste under the RCRA program. [...]

OTH7 - SOCMA, WH2P-00035, 14,4 Industry Assn.

A. SOCMA Recommends that EPA Pursue Broader Development of Subtitle D Contingent Management Options In a number of recent rules, EPA has offered contingent management options as a means to tailor the scope of a hazardous waste listing to reflect the degree of risk posed by a particular waste management practice. In other words, in those instances in which a facility commits at the point of generation to manage a solid waste in a manner that is lower risk, the choice and implementation of that waste management practice cause the waste to be exempt from the scope of the hazardous waste listing. SOCMA urges EPA to explore the application of the contingent management option to modify the scope and impact of the mixture and derived-from rules as well. While it is encouraging that the Agency is developing this new approach in connection with new hazardous waste listings, those facilities that generate previously listed wastes are in need of relief as well. SOCMA members have indicated that contingent management options that rely upon use of Subtitle D facilities would be of particular interest to them as options that could be feasible to implement and document without creating new compliance burdens. In this regard, SOCMA would like to offer comments on several aspects of contingent management that can affect its feasibility and utility for SOCMA members. First of all, it is important that a contingent management option be structured so that a waste can be exempt from Subtitle C at the point of generation. This serves as a significant, positive incentive to take advantage of the option since it both reduces the volume of hazardous waste generated by a facility and also has the effect of removing the waste from the application of the land disposal restrictions. The latter aspect of the exemption is important in creating the option for the waste to be disposed of in a Subtitle D facility. SOCMA recognizes and accepts that EPA needs to impose certain constraints on interim management of the exempt waste prior to disposal. To date, the Agency generally has focused primarily upon assuring that there is no interim land placement of a waste and no speculative

accumulation of the waste. SOCMA considers both of these limitations appropriate and feasible for its members to implement. Use of a consistent set of limitations for any future contingent management options would make it easier for facilities to establish systems to track and manage exempt wastes appropriately. SOCMA would also like to comment on the type of record-keeping and documentation requirements that might be developed in conjunction with any future contingent management options. In order for facilities to claim waste as exempt from the point of generation, it will be essential for facilities to be able to document their intent to manage those wastes in accordance with the terms of the exemption. It will also be essential to be able to document that the wastes were actually sent to and managed by a Subtitle D facility in a manner that satisfies the terms of the exemption. SOCMA urges EPA to follow the same documentation approach that was proposed in connection with the recent rulemaking for certain chlorinated aliphatics wastes. 64 Fed. Reg. 46475 (Aug. 25, 1999). In that context, EPA indicated that companies would be able to rely upon standard commercial documents such as contracts between the generator and the landfill owner or operator and upon invoices that document delivery of waste shipments to the landfill. This type of reliance on and recognition of the value of routine commercial records as a compliance tool would be particularly beneficial to SOCMA members. Small facilities and small businesses often have limited staff and resources to devote to administrative tasks. It would be highly preferable to create compliance requirements that allow use of ordinary commercial records rather than mandate the use of separate records and forms solely for RCRA documentation purposes. Such an approach would also be consistent with the Agency's recent focus on reducing the paperwork burden of regulatory requirements. SOCMA recognizes that it may be most productive for the Agency to use the contingent management options as one of several approaches to narrowing the scope and application of the mixture and derived-from rules. Depending upon the waste stream at issue, combining one or more tools to establish focused exemptions from the mixture and derived-from rules may well be appropriate. 1. See, e.g., the recently proposed regulations for listing certain wastes from the chlorinated aliphatics industry. 64 Fed. Reg. 46475 (Aug. 25, 1999). 2. SOCMA's perspective on the impact of unnecessary recordkeeping and reporting requirements on its members is addressed at greater length in its comments on the Office of Solid Waste Burden Reduction Project, dated Sept. 17, 1999, Docket No. F-1999-IBRA-FFFFF.

OTH7 - SOCMA, WH2P-00035, 16,2 Industry Assn.

B. SOCMA Recommends that EPA Identify Additional Categories of Wastes for Exemption from Application of the Mixture and Derived-From Rules In the preamble to the HWIR Proposal, EPA provides a summary discussion of its rationale for proposing to retain the mixture and derived-from rules. The fundamental concern is that generators could marginally treat, combine or alter wastes and thereby evade being classified as meeting a listing description: For example, without a mixture rule, generators of hazardous wastes could escape regulatory requirements by mixing listed hazardous wastes with other hazardous wastes or nonhazardous solid wastes to create a new waste that arguably no longer meets the listing description but which continues to pose a serious hazard. Similarly without a derived-from rule, hazardous waste generators could potentially evade regulation by minimal 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.... A hazardous waste system that allowed hazardous waste to leave the system as soon as

it was modified to any degree by being mixed or marginally treated would be ineffective and unworkable. Such a system could act as a disincentive to adequately treat; store and dispose of listed hazardous waste. (64 Fed. Reg. at 63389.) As SOCMA noted previously, this rationale for a comprehensive, all-encompassing application of the mixture and derived-from rules was more credible at the commencement of the hazardous waste program. After twenty years, both EPA and the regulated community have a much more sophisticated understanding of the categories and types of wastes and materials that are regulated as hazardous due to the mixture and derived-from rules. It is certainly time for EPA to go back and reexamine the various categories and types of waste and materials and identify and exempt those which are demonstrably low-risk or are fundamentally different from the listed waste from which they are deemed to originate. Even under the scenario which is currently being proposed by EPA on concentration based exit levels, no practical relief will exist for generators of these types of wastes. Because of the difficulty of obtaining a representative samples of articles and the problems posed by the matrix in analysis, most generators will not be able to take advantage of concentration based exit levels and be forced to make the conservative assumption that the listed or derived waste code still applies. Accordingly, SOCMA recommends that EPA undertake a review of the categories and types of wastes that would be appropriate candidates for specific exemptions from the mixture and derived-from rules. It would be appropriate for EPA to undertake such a review where the manner in which the waste is generated, the composition of the waste, or the physical character of the waste may provide a basis for determining the waste to present a relatively low-risk. Alternatively, the waste or material at issue may be so different from the original listed waste as to warrant independent evaluation to determine whether it warrants regulation as a Subtitle C waste. In the latter case, EPA may also want to consider whether production of the waste effectively constitutes a new point of generation. One category of materials that should be reviewed consists of the various types of articles that are deemed to become contaminated with listed hazardous waste as a result of ordinary use. Plastic, glass, wood, rags, wipes, paper, sample bottles and bottles caps were among the examples identified by SOCMA members. Not only are these articles significantly different from the substances contemplated by EPA to be covered by waste listings, they are also sufficiently different so as to pose numerous practical management problems under the hazardous waste listings. Although EPA, under 40 CFR 268.45, provides a variance for treatment and delisting of debris type waste, treatment can only occur if 1) a generator also has a TSD permit or 2) the treatment takes place in 90-day containers or tanks. The variance granted permitted under this section is extremely impractical. Most SOCMA members are 90-day generators and do not have TSD permits. The physical restrictions in actually performing treatment in a 90 unit (i.e. cleaning piping in a drum) makes the variance useless in the real world. SOCMA realizes that EPA has identified solvent-contaminated wipes as one type of wastestream that might warrant focused regulation for purposes of waste classification. In the absence of any clear guidance on how to address wipes, the states have developed a range of different practices for both waste classification and management. This diversity of views renders companies less confident in their compliance programs and can complicate management of these waste streams between states. Thus, SOCMA is encouraged that EPA has been considering a new regulatory initiative on wipes and urges the Agency to evaluate further the merits of the mixture and derived-from rules when applied to these types of articles. SOCMA members also indicated that the application of the mixture and derived-from rules can be problematic as applied to various types of equipment. Here the examples ranged from activated carbon used for emission controls for P and U wastes, to

pipings, pumps, valves and vessels, to insulation and ion exchange resins. In each instance, the presence of the listed hazardous waste at some time during use of the equipment could cause the equipment to pick up the waste code associated with that waste stream. These items are fundamentally different from the material considered by the Agency in its development of the listed waste classification. Obtaining clear and consistent compliance guidance on how to manage these types of materials can be a significant challenge, particularly for smaller facilities that do not encounter these scenarios with particular frequency. SOCMA members ask that EPA acknowledge the need for separate consideration of whether and how these materials should be regulated. These are not the types of situations that the Agency meant to address when it promulgated the mixture and derived-from rules.

OTH7 - SOCMA, WH2P-00035, 18,1 Industry Assn.

C. SOCMA Recommends that EPA Consider Broader Development of a Concentration-Based Listing Approach As previously noted in Section I of these comments, many SOCMA members are batch and specialty chemical manufacturers. As such, these facilities manufacture a variety of products, often on a sporadic basis, with product lines and waste streams that can vary considerably from one time period to another. Consequently, broad waste listings, exacerbated in their scope by the mixture and derived-from rules, can result in the unnecessary regulation of low-risk wastes from these types of operations. SOCMA urges EPA to consider broader development of the concentration-based listing approach set out in the Agency's recent proposed rule on hazardous waste listings for the dye and pigment industry. 64 Fed. Reg. 40192 (July 23, 1999). In the preamble to that proposal, EPA offered the following assessment of the potential merits of this approach: There are several reasons for using a concentration-based listing approach for the deferred dyes and pigment wastes. First, these wastes are generated by an industry that uses batch processes to manufacture a variety of products, in response to market demand for a wide variety of dye and pigment products. Batch operations may result in highly variable wastes at the same facility or different facilities. A concentration-based approach allows the variable wastes generated at these facilities to be evaluated individually for hazard, so only the truly hazardous wastes are listed. This tailored approach is more cost-effective for industry than a standard listing, and avoids the unnecessary regulation of nonhazardous waste. (64 Fed. Reg. at 40198.) Given that many of its members are batch and specialty chemical manufacturers, SOCMA is quite interested in the potential use of concentration-based exemptions from the mixture and derived-from rules. By focusing on a particular group of wastes, either from a particular industry or a particular type of waste operations, EPA should be able to focus its resources on the primary constituents at issue in those wastes. Incorporating a contingent management approach could further enable the Agency to focus its resources on a limited range of waste management scenarios. Thus, the development of concentration-based limits that might serve as parameters for qualifying for exemption from the mixture and derived-from rules could be a much more focused and feasible undertaking than that contemplated by EPA's efforts to establish national exit levels for all constituents of concern. By addressing its resources in this manner, EPA should be able to provide substantive relief to at least some waste generators well in advance of its finalization of any exit levels based on the comprehensive 3MRA exit-level approach. As SOCMA commented relative to EPA's development of this approach in the proposed rulemaking for certain dyes and pigment wastes, the accuracy and validity of the scientific underpinnings for the establishment of

concentration-based limits will be a key factor in any such rulemaking. Furthermore, the Agency's approach to implementation of any concentration-based exemption will need to take into account the practical circumstances and resource constraints typical of batch and specialty chemical manufacture.¹ For further discussion of these concerns, see SOCMA's Comments on the Proposed Rule on Hazardous Waste Listings for the Dyes and Pigment Industry, Docket No. F-I 999-DPIP-FFFFF, July 23, 1999. SOCMA filed comments on September 21, 1999.

OTH7 - SOCMA, WH2P-00035, 19,3 Industry Assn.

D. SOCMA Recommends that EPA Pursue A Contingent Management Option for Qualified Off-Site Wastewater Treatment SOCMA recommends that EPA also consider the development of a contingent management option that would exempt wastewater from the mixture and derived-from rules when the wastewater is sent for treatment at a qualified off-site wastewater treatment facility. Under the current hazardous waste regulations, wastewaters which are classified as hazardous waste must be counted and manifested as Subtitle C hazardous waste when sent for treatment at an off-site wastewater treatment facility. Admittedly, the receiving facility does not have to have a Subtitle C permit to receive and treat the wastewater so long as the wastewater is placed into a unit which qualifies as an exempt wastewater treatment unit as defined in 40 C.F.R. § 260.10. The receiving facility necessarily also needs to be permitted under the Clean Water Act to manage that particular type of wastewater. Often the wastewaters that are sent off-site are extremely dilute streams that bear a waste code classification simply by virtue of the mixture and derived-from rules. Some off-site facilities that would be able to handle these waste streams are reluctant to receive them due to the need for the wastes to be shipped and manifested as hazardous waste. Further, the hazardous waste classification of the material can unnecessarily restrict the ability of the receiving facility to store the material in the event that it cannot be placed into the wastewater treatment system directly upon arrival. The receiving facility is unable to store the wastewater in any tank that is not exclusively dedicated to wastewater treatment, thereby qualifying for the wastewater treatment unit exclusion. Another example of this is where product (which is a listed waste) is shipped intra-company and interstate. Often the transportation vehicles belong to a transporter and not facility shipping the product. The vessels containing the product require cleaning after emptying at the receiving facility. However, this wash water contains minute quantities of listed waste, which then makes it a listed waste. The facility generating the wash water does not have the treatment capability for the water but the facility generating the product does. In order to ship the wash water from one facility to another, the wash water must be manifested and the first facility is required to have a TSD permit for both storage and treatment of the wash water. All of the management requirements for the storage containers, the treatment system and the documentation associated with such an activity are triggered, even though the wash water is being shipped intra-company and it is no different than waters being generated by the first facility and treated in a CWA exempt unit. The effort exerted because of the impracticality of the mixture rule is tremendous. However, it pales in comparison to the cost of shipping that wash water to a TSD as a hazardous waste, when the volumes are considered. These logistical problems often complicate the ability of SOCMA members to ship low-risk wastewaters to qualified off-site facilities. Unlike commodity chemical manufacturers, SOCMA members have smaller quantities of wastewaters of varying composition and would benefit from greater flexibility in the requirements governing off-site shipment of these wastewaters. Consequently,

SOCMA recommends that EPA consider developing a contingent management option that would exempt wastewaters from the automatic application of the mixture and derived-from rules in those instances where the wastewaters are sent for off-site treatment at a qualified wastewater treatment facility. SOCMA recognizes that certain conditions would need to govern the terms of such an exemption, including prohibitions on speculative accumulation and placement on the land. In order for the wastewater to qualify for the exemption at the point of generation, the generating facility also would need to be able to document its intent to send the wastewater to a qualifying facility. A further issue to be considered would be how the waste codes associated with the wastewater would be tracked and recorded by the receiving facility for purposes of downstream classification of materials generated by that wastewater treatment facility. SOCMA believes that appropriate notice or recordkeeping requirements could be established to address this concern.

OTH7 - American Industrial Health Council, WHWP-00100, 4,3 Industry Assn.
AIHC supports the development of generic national exit levels as a fundamental element of an HWIR program. However, the conservatism inherent in the extrapolation of generic national levels generates exit levels that are often overly protective for the risks posed in any given setting. Consequently, AIHC believes that development of contingent management options which provide greater flexibility to consider unit-specific and site-specific risks is necessary to provide any meaningful relief from the mixture and derived-from rules.

OTH7 - Eli Lilly and Co., WHWP-00201, 20,1 Industry
Lilly strongly supports providing contingent management options throughout the RCRA program. The Agency states in the proposed HWIR that "a waste's risk is due not only to its chemical composition, but also to the manner in which it is managed, which can greatly affect the amount of chemical constituents that ultimately reach a human or environmental receptor." 60 Fed. Reg. 66395. Lilly applauds the Agency's recognition that waste should be defined as "hazardous" based on how the waste is managed, rather than on some speculative theory of how it might be mismanaged. The addition of contingent management options to the exit criteria effectuates the clear legal authority of the Agency to define hazardous wastes based on how they are actually managed, and will rightly focus the resources of the Agency and the regulated community on wastes and waste handling practices in proportion to the risks they pose in the real world.

Lilly supports the Agency's interpretation of RCRA as allowing the provision of contingent management options. 60 Fed. Reg. 66395. Lilly also agrees with the Agency's statements that both waste management practices and state solid waste management programs have greatly improved since 1980 when the mixture and derived-from rules were originally adopted. 60 Fed. Reg. 66396. Lilly believes that many mixture and derived-from wastes can be managed safely in non-hazardous waste landfills and that providing a conditional exit from Subtitle C based on such management is an improvement over the current mixture and derived-from rules.

OTH8

Exemption for Waste that does not Exhibit a Characteristic and that is Disposed in a Municipal Landfill that Complies with EPA's Regulations at 40 CFR Part 258

OTH8 - Bethlehem Steel Corp., WH2P-00004, 7,1 Industry

EPA should expand and simplify the landfill only option. 36. EPA states in its HWIR proposal that one alternative it is considering is to provide a landfill only option, by which wastes could be disposed in landfills as non-hazardous (but would remain hazardous for other purposes). 64 Fed. Reg. at 63392. According to the agency, [t]his option could allow for less conservative exemption levels. Id. 37. Bethlehem recommends that EPA expand and simplify this option. Specifically, Bethlehem recommends that the landfill only option apply to any waste that does not exhibit a hazardous characteristic and that is disposed in a municipal landfill that complies with EPA's regulations at 40 C.F.R. Part 258 (Criteria for Municipal Solid Waste Landfills). 38. This expanded option makes sense because it will eliminate the unintended risks associated with transporting these wastes long distances to hazardous waste landfills. 39. This expanded option also makes sense because EPA's regulations at 40 C.F.R. Part 258 ensure that a landfill incorporates protective design features, including a composite liner, a leachate collection system, and appropriate daily cover. Financial assurance for final closure and long-term monitoring of the landfill are also required under these regulations. 40. Disposing of non-characteristic wastes in these landfills would not materially change the low level of risks that are already present as a result of disposal of other, non-hazardous materials in these landfills. 41. This expanded option would be simple to implement. Industries, landfill operators, and state agencies are all familiar with the tests for whether a waste is characteristically hazardous. 42. This expanded option is faithful to EPA's original proposal regarding its hazardous waste regulations in 1978. Under that proposal, the hazardous waste listings served as a rebuttable presumption. This presumption automatically lifted if a facility submitted test data to the agency showing that the waste did not exhibit any hazardous characteristic. 43 Fed. Reg. 58945 (1978). An expanded landfill only option would be more stringent than this 1978 proposal, however, because it would apply only if a facility could document disposal of the waste in a landfill that complies with Part 258.

OTH9

EPA Should Develop and Implement a Vision for Hazardous Waste Identification that Eventually Abolishes Listings and Replaces them with a Characteristic

OTH9 - General Electric, WHWP-00193, 2,1 Industry

[...] Develop a complementary contingent management program which is based on utilizing high quality and appropriate non-Subtitle C facilities which are not sensitive to the exact concentration of the large number of constituents in the wastestream. EPA can implement this program through an expansion of 40 CFR 261.4 and 261.6. This approach complements the constituent-based contingent management approach discussed above. It has the advantage that qualifying wastes can exit to specific types of facilities based on the quality and type of facility, independent of the levels of several hundred different constituents. It is a more cost-effective exit mechanism for many types of wastes going to protective alternative management activities where waste constituent levels are not a determinant of protective management. For example, metal bearing soils could go to a lined, Subtitle D landfill with groundwater monitoring and no nearby drinking water wells regardless of whether the concentration level of the metals were ppb, ppm, or percent levels. High Btu organic wastes could go to a non-Subtitle C industrial boiler or furnace as long as the waste contained no metals and the CO level indicated the thermal facility was operating under good combustion conditions. Permits would be required to be amended to specify which wastes a facility is eligible to receive. The generator would need to keep records showing that he sent his waste to an approved location. Once the details of this vision are in place, the vision lends itself to a phased implementation approach. The prohibition on dilution could be promulgated quickly and could replace the mixture and derived-from rules. Also, there are some listings which could be eliminated immediately (e.g., F005 Benzene, F003, etc.) because they are already covered by the TCLP or a characteristic. There are many other listings which could be eliminated as new constituents are added to the TCLP. EPA could phase in the modified LDR and risk-based exit levels for different scenarios on different timeframes. Finally, EPA can implement the supplemental contingent management program on a phased basis. E. Conclusion In conclusion, GE believes that the HWIR proposal is an inadequate patch on a sorely broken program and is premature in a number of respects. The technical underpinnings of the proposal need significant improvement to pass scientific muster, the policy framework is undeveloped, and there are significant enforcement and implementation issues that require thoughtful and concerted attention. GE appreciates the Agency's attempt to be responsive to industry requests for RCRA regulatory reform, but believes all interests would be better served by a better thought-out re-proposal. GE recommends that EPA discard their "Band-Aid" approach to fixing the hazardous waste definition and undertake the needed goal-setting and planning activities to be followed by the further development of HWIR itself. A discussion of the long term goals for the program and the plan for achieving them should be published for comment within 6 months. The Agency should then issue either a new proposal or a supplemental proposal within 12 months that describes a more mature Subtitle C exit program. As stated earlier in these comments, if EPA does not take the necessary time to develop this proposal properly, then counter-productive precedents will be set and future reforms will be considerably more difficult to achieve. GE would be willing to work with the Agency to further develop this vision statement and implementation plan. [...]

OTH10
Exemption for Wastes that Meet LDR Requirements

CMA8 & OTH10 - Ciba-Geigy Corp. WHWP-00197, Ltr. Industry

[...] If these important revisions will require the Agency to miss its court ordered deadline for finalizing the HWIR rule, we recommend EPA provide an interim final rule that provides relief to the regulated community by adopting one or both of the following exemptions: (1) Wastes that meet the applicable waste code specific LDR requirement and the Universal Treatment Standards (UTS) should be exempted from carrying any listed waste codes. (2) Except for wastes listed for metals, the residues from non-commercial permitted Subtitle O incineration (e.g. incinerator scrubber water, slag and ash), should be exempted from the derived-from rule. Both of these exemptions would apply to materials which the Agency has already determined meet a "minimize threat" standard and should be expeditiously exempted from the hazardous waste listings.

OTH11
Exemption for Combustion Residues that meet EPA Established Generic
Exclusion Levels

OTH11 - Onyx Env. Services, WH2P-00015, 3,2 Waste Mgmt. Co.

In the event the Agency were to reject the changes proposed by CMA, OES is proposing another approach to exclude combustion residues from subtitle C regulation. The agency could establish generic exclusion levels for hazardous constituents present in combustion residues (i.e. ash, slag, scrubber solids) generated from the proper and complete combustion of hazardous wastes in permitted and interim status combustion units. If the residues meet the generic exclusion levels for all applicable hazardous constituents that may be present, the wastes would exit subtitle C regulation. All residues meeting the generic exclusion levels would be eligible for land disposal in a subtitle D landfill. To ensure the most stringent LDR standards are attained prior to land disposal, the exclusion levels should match the Universal Treatment Standards listed in 40 CFR 268.48 for all applicable hazardous constituents. The facility would be required to test the residues in accordance with their waste analysis plan to verify the generic exclusion levels were met for all applicable hazardous constituents that may be present. If the generic exclusion levels were not met, the combustion residue would remain hazardous and require further treatment and disposal in a subtitle C unit. The Agency has set precedence for such regulatory relief by codifying generic exclusion levels for nonwastewater residues resulting from high temperature metals recovery (HTMR) processing of K061, K062 and F006 waste, in units identified as rotary kilns, flame reactors, etc., that are disposed in subtitle D units.[see 40 CFR 261.3(c)(2)(ii)(C)] Equivalent regulatory relief for combustion residues is justified because the two wastes would pose parallel risks to human health and the environment, if similarly regulated. The proposed changes are simply an expansion upon existing exclusions from the regulatory definition of hazardous waste. Therefore, the proposed changes could be easily incorporated into the existing regulations. If OES's proposed regulatory changes were codified, a permitted incineration facility, for example, could manage the wastes fed into the incinerator to generate residuals that meet the generic exclusion levels. Wastes with high concentrations of inorganic constituents could be excluded from certain waste feed "runs" to generate residuals that meet the generic exclusion levels. As a result, the residuals would be eligible for land disposal in a subtitle D landfill. The combustion facility would be required to test the residues in accordance with the facility's waste analysis plan to verify the applicable generic exclusion levels are met. Under the OES proposed changes, the Universal Treatment Standards are incorporated as the generic exclusion levels. Therefore, a combustion facility would have to meet generic exclusion levels for both organic and inorganic constituents that may be present in the combustion residue prior to exiting subtitle C regulation. Thermal treatment destroys virtually all organic constituents present in the parent wastes. As a result, combustion residues meeting the generic exclusion levels would pose no greater risk when disposed in a subtitle D landfill than are already present through land disposal of HTMR residues in accordance with 40 CFR 261.3(c)(2)(ii)(C). In addition, the criminal and civil penalties associated with improper treatment and disposal of hazardous waste would prohibit a permitted/interim status combustion facility from evading regulatory requirements and land disposing improperly treated residues. Supporting Arguments. If codified, the proposed changes would afford significant benefit to human health and the environment through hazardous waste

minimization, while providing considerable economic relief to industry. A permitted or interim status combustion facility could reduce the total quantity of hazardous waste residues generated by regulating the feed of inorganic constituents into the combustion unit. The overall risk to the environment would be minimized as a result of the reduction in total quantity of residues generated that contains hazardous levels of inorganic constituents. Minimizing generation of hazardous waste combustion residues would significantly reduce the volume of waste placed in to a subtitle C landfill by: 1) diverting excluded residues from subtitle C land disposal; 2) reducing the quantity of waste requiring stabilization, thereby, reducing the volume of stabilization materials placed in subtitle C landfills. The reduced generation of hazardous waste, and the conservation of subtitle C landfill space would provide significant benefit to human health and the environment. The subtitle C landfill space conserved could be more effectively utilized for disposal of high-risk hazardous wastes. Ultimately, the agency would achieve hazardous waste minimization through voluntary efforts of industry with no additional risk to human health and the environment. The regulatory relief would provide economic incentive to minimize the quantity of hazardous combustion residues generated by reducing disposal costs. The costs associated with land disposing combustion residue in a subtitle C landfill are much higher than the costs for land disposal in a subtitle D landfill. The transportation and disposal costs for combustion residues generated by an Illinois facility are 300% higher for disposal in a subtitle C landfill than they are for disposal in a subtitle D special waste landfill. The increased costs are related to higher tipping fees charged by subtitle C landfills and higher transportation costs. Transportation costs are generally higher for subtitle C disposal because of the greater distance traveled to the far less prevalent subtitle C landfills. In the preamble to the proposed rule (Section III, C, page 63389), the agency relates the risks associated with disposal of combustion ash to the potential for combustion to "...result in a higher concentration of inorganic chemicals (especially metals) than their parent wastes." The agency further states that "As a result of combustion, the wastes would have their volumes greatly reduced, but could still contain the same amount of inorganic chemicals." When considering all combustion residues alike, this assumption provides a sound basis for developing regulations designed to minimize risks associated with disposal of combustion residues. However, regulating all combustion residues alike is overly restrictive. The agency does not recognize that all combustion residues are not equally hazardous, and the hazards of the residues can be minimized through management of the wastes fed into the combustion device. The regulatory changes proposed by OES provide a more definitive approach to regulating combustion residues, and better reflect the risks these wastes pose to human health and the environment.

MDF2 & OTH11 - Onyx Env. 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.

OTH11 - Onyx Env. Services, WH2P-00015, 6,2 Waste Mgmt. Co.

Proposed Regulatory Language. 261.3(c)(2)(ii)...(F)(1) Combustion residues, such as ash, slag, and scrubber solids, resulting from permitted or interim status combustion of hazardous waste, that are disposed in subtitle D units, provided that these residues meet the generic exclusion levels identified in the tables in this paragraph for all constituents, and exhibit no characteristics of hazardous waste. Testing requirements must be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues must be collected and analyzed quarterly and/or when the process or operation generating the waste changes. Persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements. Maximum for any single Constituent composite sample--TCLP (mg/l) (Incorporate UTS table). (2) A one-time notification and certification must be placed in the facility's files and sent to the EPA region or authorized state for combustion residues that meet the generic exclusion levels for all constituents and do not exhibit any characteristics that are sent to subtitle D units. The notification and certification that is placed in the generators or treaters files must be updated if the process or operation generating the waste changes and/or if the subtitle D unit receiving the waste changes. However, the generator or treater need only notify the EPA region or an authorized state on an annual basis if such changes occur. Such notification and certification should be sent to the EPA region or authorized state by the end of the calendar year, but no later than December 31. The notification must include the following information: The name and address of the subtitle D unit receiving the waste shipments; the EPA Hazardous Waste Number(s) and treatability group(s) at the initial point of generation; and, the treatment standards applicable to the waste at the initial point of generation. The certification must be signed by an authorized representative and must state as follows: "I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

OTH12

EPA Should Establish a Threshold Level Below Which Subtitle C Would not Apply for Wastes Properly Disposed of in a Subtitle C Facility by Small-scale Generators

OTH12 - American Institute of Chemical Engineers, WHWP-00084, 5,2 Industry Assn.
Relief for Small-Scale Generators: The regulation should establish a threshold level, based on concentration, mass, and volume, below which Subtitle C would not apply for wastes properly disposed of in a Subtitle C facility by small-scale generators. It seems inappropriate to spend money on laboratory fees and administrative paperwork to achieve and maintain the exemption when the same resources could be better spent on actual pollution prevention or treatment. A threshold for Subtitle C for small-scale generators would provide a powerful incentive for achieving the overall objective of reducing hazardous waste generation and thus should be included in the regulation.

OTH 13

EPA should develop a special MDF for acutely toxic wastestreams

OTH13 - TRW, WH2P-00024, 5,2

Industry

Develop a Special Mixture and Derived-From Rule for Acutely Toxic Waste Streams. EPA has listed certain commercial chemical products as acutely toxic wastes when discarded. Many of these wastestreams are no longer acutely toxic after mixing or after treatment. Some are not acutely toxic in their as-generated state. (For example, a commercial chemical lab standard might be present in a very dilute form. In such a form, the lab sample, when discarded, would not meet the acute toxicity criteria. However, it would be classified as the acutely toxic P waste.) TRW suggests that EPA promulgate a special mixture and derived-from rule for acutely toxic wastes. The rule would allow a generator to demonstrate that as-generated, after mixing, or after treatment, the acutely toxic waste no longer met the 40 CFR 262.11 criteria for listing. These criteria are clearly stated and generators could use animal data on the mixtures or utilize the harmonic mean formula previously proposed by EPA. See 51 FR 5472 (February 13, 1986). Similar to the proposed approach EPA is suggesting for listed reactive, corrosive, or ignitable wastes, these decisions would be self-implementing by the generator. Also similar to the reactive, corrosive, and ignitable mixture and derived-from rule, the LDR would still attach at the point of generation of the waste.