

US EPA ARCHIVE DOCUMENT

Chapter VI. Comments on Other Possible Exemptions from the Mixture and Derived-from Rules

The OTH codes identify all comments that address other possible exemptions to the MDF rules. Comments on the OTH exemptions were broken down further into the following specific issue codes:

OTH1	Exemption for GAC (granular activated carbon) from MDF rules
OTH2	Exemption for wastes that are discharged to Clean Water Act-Equivalent disposal facilities
OTH3	Concentration-based conditional exemption from the mixture rule for wastewaters discharged under the CWA
OTH4	Exemption for Subtitle D leachate and gas condensate from the retroactive application of the derived-from rule
OTH5	Exemption for Personal Protective Equipment (PPE) associated with waste that was identified as hazardous waste solely because of the mixture and derived-from rule
OTH6	Expand mixture exemption for used oil to include antifreeze
OTH7	EPA should identify wastes and waste management scenarios appropriate for exclusion from the MDF rules, including exclusion based on contingent management, recycling or reuse scenarios, or upon recognition that the waste is sufficiently different to no longer warrant automatic application of a waste code under MDFs.
OTH8	Exemption for 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
OTH9	EPA should develop and implement a vision for hazardous waste identification that eventually abolishes listings and replaces them with a characteristic.
OTH10	Exemption for wastes that meet LDR requirements
OTH11	Exemption for combustion residues that meet EPA established generic exclusion levels
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
OTH13	EPA Should Develop a Special MDF rule for Acutely Toxic Wastestreams

On the following pages, each OTH comment issue is summarized, and then followed by EPA's response. A list of all the specific comments (including the comment number assigned by the EPA docket, the page, and the paragraph) that are linked to each comment issue summary is also included. The full text of these comments appear in Appendix E.

Issue Code: OTH1: Exemption for GAC (granular activated carbon) from MDF Rules

Comments: WHWP-00131, 2, 1

Comment Summary:

The Agency received one comment from NorthWestern Carbon response to the 1995 HWIR proposal, requesting an exemption for narrowly defined granular activated carbon (GAC) containing one or more listed constituents below TC levels or specific state quantitative levels) from the mixture and derived-from (MDF) rules. A summary of the specific issues raised by the commenter is provided below.

The commenter said that the use of GAC has long been the preferred technology for lightly contaminated liquid and vapor streams in remediation projects. The commenter noted that spent GAC usually contains one or more listed constituents (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 as listed in CFR 40 Part 261, Subpart C and/or specific State quantitative limits (e.g., California Code of Regulations, Title 22 Chapter 11). The waste may be considered "non-hazardous" if the analytical data demonstrates constituent quantities below these limits unless the waste is subject to the MDF rule. It was the commenter's experience that 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 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. The commenter recognizes that GAC can contain dangerous constituents that warrant hazardous waste classification, quantification limits have been established for many commonly occurring hazardous constituents. Also, testing protocols for unquantified constituents currently are in place. Therefore, the commenter requested that EPA 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 would be hazardous; however, if limits are not exceeded, non-hazardous classification is warranted.

Agency Response:

We disagree with the commenter to generally exempt narrowly defined GAC from the MDF Rule. Listed hazardous waste does not necessarily exhibit a Part 261.Subpart C characteristic and may have been listed for toxic constituents for which there is no toxicity characteristic. Absent specific information supporting a general exemption for GAC, we see no basis for viewing this mixture or derived-from waste any differently from other MDF waste.

We recognize that certain wastes (e.g., narrowly defined GAC) could be improperly captured by the broad listing definitions and/or from the MDF rule. A waste generator can always submit a delisting petition under 40 CFR 260.20 and 40 CFR 260.22 for their particular GAC hazardous waste. In addition, EPA is continuing to work on developing an HWIR exemption rule which would refine the regulation of hazardous wastes. An HWIR exemption rule could result in this waste being exempt from RCRA Subtitle C regulation if it no longer exhibits any hazardous characteristic and lab analysis shows that the concentrations of constituents of concern are below risk-based “exit levels”.

Issue Code: OTH2: Exemption for Wastes that are Discharged to Clean Water Act-Equivalent Disposal Facilities

Comments: WHWP-00177, 2, 3

Comment Summary:

The Agency received one comment from Westinghouse Electric Corp. in response to the 1995 HWIR proposal, requesting expansion of the mixture and derived-from (MDF) rules to include wastes that are discharged to Clean Water Act (CWA)-equivalent disposal facilities. The comment is provided below.

The EPA should consider expanding the mixture and derived-from rule exclusion to include wastes that are discharged to CWA-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 CWA programs. This change would broaden the existing mixture and derived-from rule exclusion to other wastes.

Agency Response:

This comment was received on the 1995 HWIR proposal. Since then, Congress passed a legislation, the Land Disposal Program flexibility Act of 1996, and President Clinton signed it into law on March 26, 1996 (Public Law 104-119, 100 Stat. 830) and EPA promulgated a LDR Phase III notice (61 FR 15660-15668) on April 8, 1996. The 1996 LDR notice was published in response to the legislation, which stated that hazardous wastes which are hazardous only because they are identified as exhibiting a characteristic are not prohibited from land disposal if they are managed in either a treatment system whose ultimate discharge is regulated under the CWA (including both direct and indirect dischargers), a CWA-equivalent treatment system, or a Class I nonhazardous injection well regulated under the SDWA, provided that the wastes no longer are hazardous (i.e. no longer exhibit a characteristic) at the point land disposal occurs.

The commenter may find the legislation and the 1996 LDR rules can actually serve as our partial response to their request. Please note that the legislation and the LDR notice apply only to wastes that are identified by characteristic, and so does not apply to listed wastes nor a number of wastes, such as F003 ignitable solvents, listed as hazardous solely because they exhibit a characteristic of hazardous waste. See 40 CFR 268.1 (c) and the 1996 LDR rule for details.

The commenter did not elaborate on the wastes (i.e., characteristic or listed) nor CWA-equivalent disposal facilities. They used the Washington Sate soil column permitting program as an example to describe certain disposal facilities that they believe meeting the intent of a "CWA-equivalent" system. The commenter did not provide us any specific information about the wastes, or the waste management situations (e.g., storage conditions, pre-treatment processes, on-site or off-site discharge, types of CWA-equivalent disposal facilities, and ultimate discharge). In any event, this comment is beyond the scope of today's rule.

Issue Code: OTH3: Concentration-based Conditional Exemption from the Mixture Rule for Wastewaters Discharged Under the CWA

Comments: WHWP-00182, 4, 2

Comment Summary:

The Agency received one comment from DuPont in response to the 1995 HWIR proposal, requesting a concentration-based conditional exemption from the mixture rule for wastewaters discharged under the Clean Water Act (CWA). A summary of the specific issues raised by the commenter is provided below.

The commenter supported the Agency's intent to retain existing mixture and derived-from (MDF) rule exemptions, both codified and contained in policy directives, from the hazardous waste identification system, particularly for mixture and derived-from wastes, e.g. 40 CFR 261.3(a)(2)(iv)(A)-(E) and policy memorandums such as the "Skinner Memorandum" dated August 23, 1995. The commenter also recommended that the Agency consider expanding the scope of these existing exemptions, especially 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 commenter believed that the generator also should 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). The commenter also believed a concentration-based conditional exemption from the mixture rule was more appropriate than a de minimis approach because not all Appendix VII and VIII constituents currently are associated with wastes listed in 40 CFR 261.33. The commenter suggested 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.

Agency Response:

As discussed in response to comment issue CMA2, EPA is receptive to the idea of expanding the exemptions in 40 CFR 261.3(a)(2)(iv)(A) and (B) (the "headworks" exemption). If we decide to pursue such an expansion, we would do so in a separate proposal.

Issue Code: OTH4: Exemption for Subtitle D Leachate and Gas Condensate from the Retroactive Application of the Derived-from Rule

Comments: WHWP-00139, 40, 3; and WH2P-00006, 1, 2

Comment Summary:

The Agency received two comments from waste management companies in response to both the 1995 and the 1999 HWIR proposals, requesting an exemption for Subtitle D leachate and gas condensate from the retroactive application of the derived-from rule. A summary of the specific issues raised by the commenter is provided below.

BFI raised concern over the retroactive application of the mixture and derived-from (MDF) rules to Subtitle D leachate and gas condensate at Subtitle D landfills that legally received for disposal solid waste that at some later date may become a listed hazardous waste. The MDF rules are far too crude a regulatory construction to be reasonably relied upon to properly identify whether leachate and gas condensate from Subtitle D landfills are hazardous. The commenter noted that the HWIR rule exacerbates the problem because of its exceedingly high exemption demonstration costs. Despite its technical sophistication, the rule failed the common sense test in providing a straightforward solution to a problem that could be solved very easily simply on policy and legal grounds. The commenter also noted that EPA has not formulated a consistent policy for dealing with the issue of retroactivity.

BFI believed that leachate and gas condensate from Subtitle D landfills should be evaluated for treatment and disposal based on their actual physical and chemical characteristics. The commenter offered that it was 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. Also, leachate and gas condensate are not simply dilute forms of the wastes disposed of in a landfill, particularly if the landfill co-disposes of 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. The commenter viewed the HWIR rule as an extremely cumbersome tool to determine whether the MDF rules improperly identify leachate or gas condensate as hazardous wastes.

BFI noted that most Subtitle D landfills manage their leachate using publically owned treatment works (POTWs). However, most 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. If a facility cannot place its leachate or condensate with a POTW, then the owner/operator either has to 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, if a Clean Water Act (CWA) permit is not obtainable due to lack of a discharge point, the owner/operator would have to seek a Subtitle C treatment permit. The

commenter believed that the Agency was fully aware that obtaining a Subtitle C permit is both expensive to obtain and maintain, and can create a variety of additional regulatory problems. 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. The commenter was concerned that sometimes this could lead to premature closure of a landfill or the inability to carry out capacity expansions.

BFI believed that the Agency should exempt subtitle D leachate and gas condensate from the retroactive application of the derived-from rule. The commenter offered 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.

Option I: Exempt leachate and gas condensate from non-hazardous subtitle D landfills from the retroactive application of the MDF 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 MDF 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 (that will be destined for treatment at a POTW or private treatment work permitted under the CWA) from non-hazardous 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 characteristic to determine their ultimate management just as they are today for solids coming from a POTW when the hazardous wastes are disposed of in a sewer system rather than transported.

Waste Management noted that EPA had acknowledged an interest in integrating RCRA and CWA standards to avoid unnecessary regulatory duplication. The commenter also believed that EPA had determined that leachate managed in POTWs, even those deemed hazardous under the derived-from rule, do not require special monitoring or management standards. As a result, any management of a derived-from leachate pursuant to RCRA requirements would be a duplication of CWA effluent guidelines. Therefore, the commenter argued that EPA should amend the

derived-from rule to exempt leachate from municipal solid waste (MSW) landfills that is managed in accordance with 40 CFR Parts 136 and 145. The commenter believed that this would eliminate 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.

Agency Response:

EPA thanks the commenters for providing their perspective on the potential impact of hazardous waste listings and the mixture and derived-from rules on management of leachate from Subtitle D landfills. EPA has responded to this issue in two final listing determinations to date. Under the 1998 petroleum listing final rule (63 FR 18635), EPA added an exclusion for leachate and gas condensate from K169, K170, K171, and K172 petroleum refining operations disposed prior to February 8, 1999, provided certain conditions are met (40 CFR 261.4(a)(15)). Under the recent chlorinated aliphatics listing final rule, EPA decided not to add such an exclusion for these types of wastes because there was no evidence that this waste has been disposed of in non-hazardous waste landfills (65 FR 67068, 67105).

EPA believes that addressing the regulatory status of this type of leachate in each individual listing determination continues to be the best approach. We do not think it would be appropriate to make a blanket exclusion for all such leachate in advance of possible listing determinations. Information on the potentially listed wastes and their management could influence our decisions regarding the regulation of leachate. As discussed earlier in response to comment CMA6, EPA has several concerns about the suggested regulatory exemption for leachate derived-from landfilled hazardous waste. Nor does EPA believe that regulating the treatment of hazardous waste leachate is duplicative with CWA requirements. Hazardous waste leachate, like all hazardous wastewaters, is already eligible for a number of exemptions when managed in tanks and discharged under the CWA. The sludge from such a hazardous wastewater treatment system, however, is not subject to CWA standards, which is one of the reasons EPA continues to regulate the treatment of hazardous wastewaters (including leachate) as hazardous.

Issue Code: OTH5: Exemption for Personal Protective Equipment Associated with Waste that was Identified as Hazardous Waste Solely Because of the MDF Rule

Comments: WHWP-00072, 47, 1

Comment Summary:

The Agency received one comment from DOE in response to both the 1995 and the 1999 HWIR proposals, requesting an exemption for potentially contaminated personal protective equipment (PPE) under the mixture and derived-from (MDF) rules. A summary of the specific issues raised by the commenter is provided below.

DOE noted that pursuant to the MDF rules, PPE that has the potential of having been in contact with listed waste during its use is managed commonly as listed waste. The commenter was

concerned that the guidance in SW-846 (referenced in the preamble) was 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. Also, 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 would allow PPE to exit Subtitle C regulations.

The commenter suggested 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: 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: Personal protective equipment worn when handling hazardous waste listed solely because of the MDF rule, and that does not exhibit the characteristics of hazardous waste, is not a hazardous waste. The commenter added that the matrix and concentration of hazardous constituents of the MDF 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 MDF 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. The commenter also recommended that EPA include a specific exclusion for radioactive PPE in the upcoming supplemental proposal on HWIR mixed waste exit criteria.

Agency Response:

The SW 846 methods can be used as guidance, not but they are not requirements. EPA recognizes that certain environmental samples are nonhomogeneous in nature. We, as well as the commercial analytical community, are moving toward the performance-based measurement system (PBMS) approach, which gives TSD facilities flexibility to design sampling and analyses they think best to collect and characterize their wastes.

We disagree with the commenter to generally exempt PPE that have been in contact with listed waste during its use and that does not exhibit the characteristics of hazardous waste. Listed hazardous waste does not necessarily exhibit a Part 261.Subpart C characteristic and may have been listed for toxic constituents for which there is no toxicity characteristic. Absent specific information supporting an exemption for PPE, we see no basis for viewing this mixture or derived-from waste any differently from other MDF waste.

In addition, many types of PPE waste can be exempted from hazardous waste treatment under the debris rule (40 CFR 261.3 (f)) once they have been treated using one of the extraction or destruction technologies specified in Table 1 of 40 CFR 268.45. In addition, a waste generator can always submit a delisting petition under 40 CFR 260.20 and 40 CFR 260.22 for their PPE hazardous waste.

Finally, EPA is continuing to work on development of an HWIR exemption rule which would

refine the regulation of hazardous wastes. An HWIR exemption rule could result in narrowly defined spent PPE being exempt from RCRA Subtitle C regulation if it no longer exhibits any hazardous characteristic and lab analysis shows that the concentrations of constituents of concern are below risk-based “exit levels”.

Issue Code: OTH6: Expand the Mixture Exemption for Used Oil to Include Antifreeze

Comments: WHWP-00019, 1, 1; and WHWP-L0005, 12,1

Comment Summary:

The Agency received two comments in response to both the 1995 and the 1999 HWIR proposals, requesting expansion of the mixture exemption for used oil to include antifreeze. One of the comments was received from a waste management company and one was from an industry association. A summary of the specific issues raised by the commenters is provided below.

Lenz Oil Service, Inc. noted that it was hoping for a rule that would allow recycling of some low-risk wastes as non hazardous that are regulated currently 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. Therefore, wastes that are recycled can be considered hazardous wastes even if they actually are no more "hazardous" to handle, recycle or use in place of virgin products, than their virgin counterparts. However, the used oil 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. The commenter added that 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. The commenter believed that the mixture rule for used oil should remain as it was written and enacted originally.

Under the current TCLP regulatory scheme, the commenter noted that it was unable to recycle petroleum solvents (for reuse or for fuel cutter stock) and used automotive antifreeze (for reuse). Lenz Oil Service, Inc. believed that TCLP test was inappropriate for recycled liquid wastes and encouraged improper disposal by generators. The commenter added that used oil and used solvent are virtually identical chemically, and used antifreeze contains no more contaminants than used oil. Generators of used antifreeze need an easy, inexpensive way to dispose of their antifreeze; 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. From an informal survey, the commenter found many of these generators are disposing of their antifreeze improperly in their general refuse or by dumping it on the ground or into septic systems. The commenter felt that the used oil recycling management standards are very adequate for petroleum solvents and used automotive antifreeze.

The National Auto Radiator Service Association (NARSA) argued that used antifreeze does not exhibit hazardous characteristics. The commenter believed that any tetrachloroethylene or benzene contamination resulted from cross-contamination or was an artifact of the TCLP. Based on several studies, the commenter recommended that EPA adopt antifreeze best management standards. NARSA added used antifreeze should be considered non-hazardous and outside Subtitle C if managed in a controlled manner. This could be accomplished by adoption of their recommended contingent management approach. NARSA did not believe that exit levels should be applied to antifreeze when managed properly.

Agency Response: As the commenter noted correctly, used antifreeze often contains lead levels

above the regulatory limit of 5 ppm.

At the request of the Antifreeze Coalition (Arlington, VA), the agency studied the possibility of excluding used antifreeze being recycled from the definition of solid waste to encourage recycling. On April 23, 1998 the Agency published a proposed policy statement indicating that used antifreeze “rarely fails the TCLP” based on data submitted by industry. We received comments and supporting data that suggested that the levels of lead in antifreeze were much higher. After reviewing those comments the Agency decided not to finalize the statement or exclude used antifreeze being recycled from the definition of solid waste. The Agency stated that in any future action to be undertaken, more data on the following issues will be necessary:

1. State approaches to dealing with spent antifreeze,
2. Data on manufacturing trends of original equipment manufacturers (OEM) and secondary market (replacement) radiators, and
3. Data on trend of amounts of lead and other constituents in spent antifreeze (with appropriate QA/QC).

If the Agency decides to take further action, EPA would evaluate whether applying used oil-type standards to antifreeze is appropriate.

Issue Code: OTH7: EPA Should Identify Wastes and Waste Management Scenarios
Appropriate for Exclusion from the MDF Rules

Comments: WH2P-00035, 1, 3; WH2P-00014, 2, 2; WHWP-00220, 3, 4;
WH2P-00035, 6, 2; WH2P-00046, 2, 4; WH2P-00033, 4, 2;
WH2P-00035, 7, 1; WH2P-00035, 13, 5; WH2P-00035, 14, 4;
WH2P-00035, 16, 2; WH2P-00035, 18,1; WH2P-00035, 19, 3;
WHWP-00200, 20,1; and WHWP-00100, 4,3

Comment Summary:

The Agency received comments from approximately seven commenters in response to both the 1995 and the 1999 HWIR proposals, requesting EPA identify wastes and waste management scenarios appropriate for exclusion from the mixture and derived-from (MDF) rules. Of those comments, three were received from industry associations, three were from industries, and one was from a utility company. A summary of the specific issues raised by the commenters is provided below.

The commenters supported the expanded use of contingent management exclusions in the RCRA program. The AIHC believed contingent management would provide greater flexibility and was the only way to provide meaningful relief from the MDF rules. SOCMA recommended that the Agency pursue broader development of Subtitle D contingent management options; identify additional categories of wastes for exemption from the application of the MDFs; consider broader development of a concentration-based listing approach; and pursue a contingent management option for qualified off-site wastewater treatment. Several commenters believed that EPA could exclude certain wastes from the definition of hazardous waste based on the way that it is managed. The commenters added that EPA had been excluding listed wastes from regulation contingent on their proper management nearly since the inception of the program (e.g., mixtures of certain solvents if they are managed in wastewater treatment units that are regulated by the Clean Water Act; 40 CFR 261.3(a)(2)(iv)(A)). Phillips Petroleum Company noted that listing decisions should be conditional, targeting wastes only when managed in ways that demonstrably are unprotective to human health and the environment.

Agency Response:

As discussed in response to comment MDF3, EPA has developed many exemptions from the definition of hazardous waste, including exemptions that depend on certain management conditions [for example, the exemption for certain residues resulting from high temperature metals recovery in 40 CFR 261.3(c)(2)(ii)(C)]. In addition, EPA plans to continue work on other types of hazardous waste exemptions, including the concentration-based exemption (HWIR exemption) discussed in the November 19, 1999 proposal.

Issue Code: 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

Comments: WH2P-00004, 7, 1

Comment Summary:

The Agency received one comment from Bethlehem Steel in response to both the 1995 and the 1999 HWIR proposals, requesting an 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. A summary of the specific issues raised the by commenter is provided below.

Bethlehem Steel recommended that EPA expand and simplify the landfill-only option. Specifically, the commenter suggested 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 CFR Part 258. The commenter believed this expanded option would eliminate the unintended risks associated with transporting these wastes long distances to hazardous waste landfills. The expanded option would be protective because landfills must have composite liners, leachate collection systems, and appropriate daily cover. Also, financial assurance for final closure and long-term monitoring of the landfill are required under these regulations. The commenter noted that this expanded option was faithful to EPA's original proposal regarding its hazardous waste regulations in 1978. Because an expanded landfill-only option would apply only if a facility could document disposal of the waste in a landfill that complies with Part 258, the option would be more stringent than the 1978 proposal.

Agency Response:

We disagree with the commenter to generally exempt any waste that does not exhibit a hazardous characteristic and that is disposed in a municipal solid waste landfill (MSWLF) that complies with EPA's regulations at 40 CFR Part 258. Because we do not believe that MSWLFs would be logical destinations for listed wastes that do not exhibit a hazardous characteristic.

With respect to MSWLFs, EPA has promulgated regulations governing the design and operation of municipal landfills (see 40 CFR Part 258). Nevertheless, many landfills now and in the future may not have liners as prescribed by 40 CFR 258.40(a)(2). The design criteria in 258.40(a)(2) apply only to new units or lateral expansions of existing units. Existing landfills (i.e., those in existence prior to the effective date as defined in Sec. 258.1(e)) do not have to meet the design requirements in section 258.40 (e.g., liner systems). Furthermore, the regulations allow exemptions from the standards depending on the location and size of the landfill (Section 258.1(f)), and States may approve alternative designs for new units or lateral expansions based on performance standards (Sec. 258.40(a)(1)). Finally, EPA is in the process of authorizing States to implement the municipal landfill regulations, and States are still working to issue permits and bring all landfills up to the regulatory requirements. EPA acknowledges that the prescribed liner system would serve to contain waste leachate, and would lessen the risk while such a liner system was intact. However, it is reasonable to assume that liner systems would

eventually fail.

Given the uncertainties discussed above, we believe it is prudent to manage waste that does not exhibit a hazardous waste characteristic in Subtitle C landfills. (See § 264.301 for hazardous waste landfills design and operating requirements). An HWIR exemption rule could result in these wastes being exempt from RCRA Subtitle C regulation if it no longer exhibits any hazardous characteristic and lab analysis shows that the concentrations of constituents of concern are below risk-based “exit levels”. In the meantime, a waste generator can always submit a delisting petition under 40 CFR 260.20 and 40 CFR 260.22 for their waste.

Issue Code: OTH9: EPA Should Develop and Implement a Vision for Hazardous Waste Identification that Eventually Abolishes Listings and Replaces them with a Characteristic

Comments: WHWP-00193, 2, 1

Comment Summary:

The Agency received one comment from General Electric in response to the 1995 HWIR proposal, requesting EPA develop and implement a vision for hazardous waste identification that eventually abolishes listings and replaces them with a characteristic. A summary of the specific issues raised by the commenter is provided below.

GE recommended that EPA develop a complementary contingent management program that is based on utilizing high quality and appropriate non-Subtitle C facilities which are not sensitive to the exact concentration of the constituents in the wastestream. The commenter noted that EPA could implement this program through an expansion of 40 CFR 261.4 and 261.6. This would allow qualifying wastes to be disposed of in specific types of facilities based on the quality and type of facility, independent of the levels of different constituents. The commenter believed this was a more cost-effective exit mechanism for many types of wastes. The commenter offered examples, such as 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. The commenter did note that permits would be required to specify which wastes a facility would be eligible to receive, and generators would need to keep records showing that they sent their waste to an approved location. Also, the commenter noted that EPA could eliminate listings immediately that are covered by the TCLP or a characteristic. And, there are many other listings which could be eliminated as new constituents are added to the TCLP. Finally, EPA could implement the supplemental contingent management program on a phased-in basis.

Agency Response:

The idea of replacing the current listing program with an expanded set of hazardous characteristics may be a possible long-term goal of the RCRA program, but there would be many technical and administrative issues that would need to be addressed. This comment is beyond the scope of today's rulemaking.

Issue Code: OTH10: Exemption for Wastes that Meet LDR Requirements

Comments: WHWP-00197, Ltr.

Comment Summary:

The Agency received one comment from Ciba-Geigy Corp. in response to the 1995 HWIR proposal, requesting an exemption for wastes that meet LDR requirements. The comment is provided below.

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.

Agency Response:

EPA does not agree that all wastes that meet LDR requirements should automatically be exempted from carrying listed waste codes. While LDR treatment requirements "minimize threat" to the extent that they represent the results obtained by the Best Demonstrated Achievable Technology (BDAT), the residuals can still pose risk that warrants disposal in a hazardous waste management unit.

As discussed in response to comment issue CMA8, EPA does think that an exemption may be warranted for certain types of combustion residues, such as slag, where organics have been eliminated and the leaching potential of metals has been reduced to acceptable levels under RCRA. We are pursuing such an exemption under a separate proposal.

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

Comments: WH2P-00015, 3, 2; WH2P-00015, 5, 2; and WH2P-00015, 6, 2

Comment Summary:

The Agency received comments from Onyx Environmental Services in response to the 1999 HWIR proposal, requesting an exemption for combustion residues that meet EPA established generic exclusion levels. A summary of the specific issues raised by the commenter is provided below.

The commenter proposed another approach to exclude combustion residues from subtitle C regulation. EPA 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. 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 non-wastewater 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 and could be easily incorporated into the existing regulations.

The proposed changes would afford significant benefit to human health and the environment through hazardous waste minimization, while providing considerable economic relief to industry. 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.

Agency Response:

As discussed in response to comment issue CMA8, EPA does think that an exemption may be

warranted for certain types of combustion residues, such as slag, where organics have been eliminated and the leaching potential of metals has been reduced to acceptable levels under RCRA. We are pursuing such an exemption under a separate proposal.

Issue Code: 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

Comments: WHWP-00084, 5,2

Comment Summary:

The Agency received one comment from the American Institute of Chemical Engineers in response to the 1995 HWIR proposal, requesting a threshold level for small-scale generators. The comment is provided below.

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.

Agency Response:

Small Quantity Generators (SQGs) and Conditionally Exempt Small Quantity Generators (CESQGs) of hazardous waste already are exempt from many RCRA requirements under the current system.

As defined in RCRA section 3001(d) and 40 CFR 260.10, a SQG generates between 100 and 1,000 kg of hazardous waste and less than 1 kg of acutely hazardous waste in a calendar month. SQGs who accumulate no more than 6,000 kg of hazardous waste at any time are subject to less stringent on-site accumulation requirements (40 CFR (262.34). Under 40 CFR 262.44, SQGs also have reduced recordkeeping and reporting requirements. SQGs must only comply with parts 262.40(a), (c), and (d); 262.42(b); and 262.43.

Under 40 CFR 261.5, a CESQG is a generator that generates no more than 100 kg of hazardous waste and less than 1 kg of acutely hazardous waste in a calendar month and accumulates less than 1,000 kg of hazardous waste at any one time. Under existing regulations, CESQGs are exempt from most Subtitle C requirements, including parts 262 through 266, 268, parts 270 and 124, and the notification requirements of 3010 of RCRA.

Issue Code: OTH13: EPA Should Develop a Special MDF for Acutely Toxic Wastestreams

Comments: WH2P-00024, 5, 2

Comment Summary:

The Agency received one comment from TRW in response to the 1999 HWIR proposal, requesting a special mixture and derived from (MDF) rule for acutely toxic wastestreams. The comment is provided below.

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.

Agency Response:

EPA believes that chemicals that are listed for acute toxicity [e.g, chemicals that have been found to be fatal to humans in low doses, see 40 CFR 261.1(a)(2)] are of high concern and warrant regulation. As discussed in response to comment issue MDF2, the fact that mixing a waste can produce a dilution effect that masks the risk posed by a chemical does not mean the risk has been eliminated. In many cases the chemical can concentrate in the sludge, or can persist in the environment.

EPA has recognized the special case of laboratory wastewaters, and has created an exemption for such wastes (when they meet certain requirements) in 40 CFR 261.3(a)(iv)(E).