

US EPA ARCHIVE DOCUMENT

Chapter VII. Miscellaneous Comments not Directly Applicable to the Final Mixture and Derived-from Rules

The MISC codes identify all comments that address issues not directly related to revising the MDF rules. Comments on the MISC issues were broken down further into the following specific issue codes:

MISC1	The supplemental LDR Phase IV proposal 61 Fed. Reg. 2338 (Jan. 25, 1996) would modify 261.3(a)(2)(iii) to state that nonwastewater mixtures are still subject to LDRs.
MISC2	The point at which residues are generated should be their point of generation.
MISC3	Mixed wastewaters collected for treatment at a wastewater treatment facility should not be considered impermissible dilution
MISC4	Comments on the contained-in rule
MISC5	Bevill mixture rule should be re-addressed
MISC6	Need to be able to remove “pass-through” codes from wastes
MISC7	Epinephrine should not be regulated as hazardous waste
MISC8	Totals LDR standard for arsenic in K088 cannot be met in treated waste, even when the untreated waste did meet the standard
MISC9	EPA should develop risk-based LDRs
MISC10	Proposal does not create incentives for recycling
MISC11	EPA should renounce its position on the application of the mixture rule to K170 listing
MISC12	EPA Should Revise the Test Method for Cyanide
MISC13	EPA Should Modify their Rules to Make their Intent Clear
MISC14	PCBs Should be Regulated Exclusively Within the TSCA Program
MISC15	EPA Should Promulgate Conditional Exclusions from the Definition of Solid Waste for Recyclable Materials
MISC16	EPA Should Use of the Higher of the Two Numerical LDR Values
MISC17	EPA Should Exclude Distilled Spirits from RCRA Regulation
MISC18	Biological Toxins May or May not be Medical Wastes if they Occur Naturally
MISC19	EPA should Exempt Wipers Containing De Minimis Amounts of Listed Solvents from the Subtitle C Regulatory System
MISC20	EPA Should Exempt Printed Wiring Board Wastewater Sludge
MISC21	EPA Should Exempt Spill-related Wastes from Train Derailments
MISC22	Remediation Wastes Should Not Be Treated the Same as Process Wastes
MISC23	EPA Should Address Mercury Contaminated Soil
MISC24	EPA Should Develop Exclusions Based on Risk for Characteristic Wastes

On the following pages, each MISC 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 F.

Issue Code: MISC1: The Supplemental LDR Phase VI Proposal would Modify 261.3(a)(2)(iii) to State that Nonwastewater Mixtures are Still Subject to LDRs

Comments: WHWP-L0004, 13, 2; and WHWP-L0004, 14, 1

Comment Summary:

The Agency received comments from Department of Defense (DoD) in response to the 1995 HWIR proposal concerning the Supplemental Phase IV proposal that would modify 261.3(a)(2)(iii). A summary of the specific issues raised by the commenter is provided below.

DoD wished to call EPA's attention to the fact that EPA's supplemental proposal to proposed LDR Phase IV in 61 Fed. Reg. 2338 (Jan. 25, 1996) was inconsistent with the mixture and derived-from rules proposal. The supplemental LDR Phase IV proposal would modify 40 C.F.R. Section 261.3(a)(2)(iii) to remove the provision that allows these listed non-wastewater hazardous wastes to exit subtitle C management standards. The supplemental Phase IV proposal thus conflicts with what is proposed in this HWIR rulemaking. Not only would the supplemental Phase IV proposal remove the proposed exclusion for derived-from wastes, it also would remove the current exclusion for wastes generated under the mixture rule.

Agency Response:

The revision of 40 CFR 261.3(a)(2)(iii) was subsequently promulgated in the Phase IV Final rule (63 FR 28639, May 26, 1998) to read:

§261.3 Definition of Hazardous Waste

(a) * * *

(2) * * *

(iii) It is a mixture of a solid waste and a hazardous waste that is listed in subpart D of this part solely because it exhibits one or more of the characteristics of hazardous waste identified in subpart C of this part, **unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in subpart C of this part, or unless the solid waste is excluded from regulation under § 261.4(b)(7) and the resultant mixture no longer exhibits any characteristic of hazardous waste identified in subpart C of this part for which the hazardous waste listed in subpart D of this part was listed.** (However, nonwastewater mixtures are still subject to the requirements of part 268 of this chapter, even if they no longer exhibit a characteristic at the point of land disposal). [emphasis added]

* * * * *

Thus the prior exclusion for derived from wastes was retained, consistent with the commenter's request.

Issue Code: MISC2: The Point at which Residues are Generated should be their Point of Generation

Comments: WHWP-00078, 8, 2

Comment Summary:

The Agency received one comment from the CMA UIC Management Task Group in response to the 1995 HWIR proposal concerning the definition of the point of generation for residues. A summary of the specific issues raised by the commenter is provided below.

The commenter noted that in the Third Third rule, EPA established the principle that the generation of a new treatability group is considered a new point of generation and thus a new point for determining whether a waste is prohibited from land disposal. In the Phase IV proposal, EPA used this principle to evaluate wastewater treatment sludges generated in Subtitle D surface impoundments. Wastewater treatment sludges not exhibiting a characteristic were not prohibited wastes, even though the sludges may be derived from characteristically hazardous waste streams. The commenter added that one group has been advised in discussions with the EPA that residual solids from Class I injection well systems also will be considered to be newly generated wastes under the proposal. The commenter believed that since EPA has estimated that there are large numbers of facilities potentially eligible to take advantage of the proposed exit levels, EPA must intend for generators to consider the point at which residues are generated to be their point of generation. Therefore, EPA should clarify that these treatment residues are eligible for the exclusion proposed, not just eligible for partial relief, because these wastes do meet the exit levels at their point of generation.

Agency Response:

With respect to the 1995 HWIR proposal, it was the Agency's intent that wastes which have been treated to meet the exemption levels would be eligible for relief if they meet the requirements of part 268. . EPA is continuing to work on developing a concentration-based exemption. Before we would promulgate a concentration-based exemption, we would first publish a proposal that would include specific exemption levels and give the public an opportunity to comment. This issue will be further addressed under the next HWIR concentration-based exemption proposal. The commenter is also correct that the general principle regarding changes of treatability group, first announced by EPA at 55 FR 22661 (June 1, 1990), remains in force.

Issue Code: MISC3: Mixed Wastewaters Collected for Treatment at a Wastewater Treatment Facility should not be Considered Impermissible Dilution

Comments: WHWP-00073, 76,2; and WHWP-00202, 43, 3

Comment Summary:

The Agency received two comments in response to the 1995 HWIR proposal concerning the definition of impermissible dilution at wastewater treatment facilities. A summary of the specific issues raised by the commenters is provided below.

The Chemical Manufacturers Association (CMA) agreed that while dilution, by itself, may not constitute legitimate treatment, there are situations of permissible dilution that EPA should clearly recognize in this exit rulemaking, just as it did in the Third Third rule and Congress did in the recent Land Disposal Program Flexibility Act. The commenter also noted that imposition of a free-standing dilution prohibition could be implemented to avert the perceived need to apply LDRs to exiting wastes, an approach which creates more problems than it solves

Bristol-Myers Squibb Co., (BMS) supported the Agency's position that a generator should not be permitted to dilute a waste stream deliberately to avoid regulation. However, the commenter believed that the Agency should clarify that prohibited dilution does not include appropriate waste collection and manufacturing operations in which waste or process streams are combined and constituents present are "diluted" as part of an integrated treatment system. The commenter offered the example of a large manufacturing facility that typically has a wastewater collection system which receives and directs many wastewater flows to the facility's wastewater treatment system. Among the streams collected in the facility's sewer system may be a wastewater stream regulated as listed hazardous waste under the mixture rule. The commenter did not believe that the Agency intended for normal collection of such waste streams to be considered "prohibited dilution." Although the Agency has addressed this issue previously (see, e.g., 55 Fed. Reg. 22,520, 22,664-67 (June 1, 1990)), confusion on the proper interpretation of the hazardous waste dilution prohibition persists. Therefore, the commenter requested that the Agency clearly state again in the Federal Register preamble for the low concentration exemption, that dilution which is prohibited does not include legitimate centralized treatment of similar waste streams.

Agency Response:

As noted by the commenter, the Agency addressed the application of the dilution prohibition as it applies to centralized treatment in the Third Third Final rule at 55 FR 22664-67. The commenter requests further clarification of the case wherein a prohibited listed wastes is collected with similar wastes in a centralized treatment system.

As stated previously (55 FR 22666), "if the wastes are all legitimately amenable to the same type of treatment, and this method of treatment is utilized for the aggregated wastes, the aggregation step is not impermissible dilution." Treatment units must be appropriately combining wastes for

common treatment. The centralized treatment of incompatible wastestreams is not legitimate treatment and constitutes impermissible dilution. “The clearest objective indication that proper treatment for a prohibited waste is being conducted is if the treatment is the same type as that on which the treatment standard is based, Thus, any aggregation before such treatment would ordinarily not be considered to be impermissible dilution. However, other forms of treatment may also be appropriate. Such determinations will be made on a case-by-case basis.”

The commenter is directed to their RCRA enforcement authority for review of their specific treatment operations.

Issue Code: MISC4: Comments on the Contained-in Rule

Comments: WHWP-00074, 4, 3; WHWP-00085, 30,3;WHWP-00145, 2, 5;
WHWP-00148, 6, 4; WHWP-00149, 7, 1; WHWP-00150, 12, 3;
WHWP-00172, 45, 1; WHWP-00177, 2,1;WHWP-00193, 23, 2;
WHWP-00243, 4,2; and WH2P-00017, 11, 1

Comment Summary:

The Agency received 11 comments in response to both the 1995 and the 1999 HWIR proposals concerning the contained-in rule. Of those comments, six were from industry, three were from industry associations, one was from a Federal Government Agency and one was from a waste management company. A summary of the specific issues raised by the commenters is provided below.

Seven commenters argued that the contained-in principle was substantively unlawful for the same reasons that the commenters believed that the mixture and derived-from rules were unlawful. They added that EPA has never proposed, taken comment on, nor officially promulgated the "contained-in" policy. Therefore, the principle was invalid procedurally since it was an attempt to impose regulatory requirements on contaminated media without going through the due process notice and comment requirements of a final rule.

The Association of American Railroads (AAR) argued that contaminated environmental media, such as contaminated soil, which is currently regulated under the "contained in" policy, should be exempt from RCRA, Subtitle C, requirements during remedial activities. AAR added that States should have the authority to establish higher exit levels for these chemicals on a site-specific basis. This process would be less burdensome than the currently required delisting process.

Phelps Dodge stated it agreed with EPA that States and EPA Regions should have the flexibility to make site-specific determinations as to whether a actively managed media "contains" a hazardous waste. This procedure should not be burdened by any EPA procedural requirements. As EPA appears to acknowledge, the cleanup of contaminated media will be expedited only if EPA and the States have the option to allow site-specific, risk-based cleanups that may involve innovative technologies or remedial approaches.

Phelps Dodge and Westinghouse both expressed concern with a statement in the 1995 HWIR proposal that said that the contained in policy applies to environmental media contaminated with "listed or characteristically hazardous waste." (60 FR 66347). Both commenters felt that media contaminated with characteristic waste should be managed as hazardous waste only if it continues to exhibit a hazardous characteristic.

Finally, DoD believed that media containing any of the 29 wastes listed solely for a characteristic should be viewed the same as characteristic wastes and a contained-in determination would not be required if the media did not exhibit a characteristic. Therefore, DoD requested that the final rule include a discussion or reference to the contained-in policy such that wastes listed solely for

ignitability, corrosivity and/or reactivity, would receive similar exemption status, whether a mixture, derived-from waste, or contained in media.

Agency Response:

The contained-in principle is the basis for EPA's longstanding interpretation regarding application of RCRA Subtitle C requirements to mixtures of contaminated media and hazardous wastes. Under the "contained-in" interpretation, soil (and other environmental media) must be managed as hazardous wastes so long as they contain listed hazardous waste or exhibit a characteristic of hazardous waste. EPA's "contained-in" interpretation was upheld (both procedurally and substantively) by the D.C. Circuit Court of Appeals in *Chemical Waste Management v. EPA*, 869 F2d 1526, 1539-40 (D.C. Cir.1989). See the LDR Phase IV final rule 63 FR 28556, 28621 (May 26, 1998) for a detailed discussion of the contained-in policy and the Agency's reason, at the time, not to codify the contained-in policy for contaminated soil.

Comments pertaining to the contained-in interpretation are outside the scope of this final rule. Although the Agency did discuss the contained-in policy in the 1995 and 1999 proposals, the Agency did not seek comment on, or in any way reconsider, the validity of the contained-in interpretation in those notices. The discussions of the interpretation were provided as background to identify categories of materials, other than "as-generated" and mixture and derived-from wastes, and whether they would be affected by exit criteria contemplated by a constituent-based exemption.

The Agency does note however, that EPA has published three Federal Register notices since the 1995 proposal that address issues associated with the cleanup of contaminated media: HWIR-media proposed and final rules (61 FR 18779-18864, April 29, 1996 and 63 FR 65873-65947, November 30, 1998), and LDR Phase IV final rule (63 FR 28555-28604, May 26, 1998). In the HWIR media rule, we addressed remediation waste management issues, including permits, the on-site storage of remediation wastes during cleanup and state authorization. As part of the LDR Phase IV final rule, we amended the treatment standards for soil contaminated with hazardous waste.

Today's final rule does not directly affect the implementation of the contained-in policy. However, wastes that are contained in contaminated media are eligible for the 40 CFR 261.3(g) exemption for wastes listed solely for a characteristic. Therefore, under today's final rule, contaminated media that contain a waste listed solely for a characteristic would no longer need to be managed as hazardous waste when it no longer exhibits a characteristic. However, consistent with the regulation of other decharacterized waste (and decharacterized contaminated media), it may remain subject to LDR requirements. (The final rule, by providing that wastes excluded under this section are subject to LDRs "as applicable," applies the current rules regarding LDR applicability to soil containing hazardous waste. See, 40 CFR §268.49. For a detailed discussion of this subject, see 63 FR 28556, 28617 (May 26, 1998).)

Issue Code: MISC5: Bevill Mixture Rule should be Readdressed

Comments: WHWP-00243, 3, 2

Comment Summary:

The Agency received one comment from Phelps Dodge in response to the 1995 HWIR proposal concerning the Bevill mixture rule. A summary of the specific issues raised by the commenter is provided below.

Phelps Dodge noted that although the intent of the Supplemental Phase IV LDR Rulemaking proposal [60 F.R. 66346-47 (January 25, 1996)] was to address EPA's alleged concerns with mineral processing wastes and the Bevill mixture rule, the plain language of the changes proposed in the supplemental rule prohibit the mixture of non-Bevill-exempt wastes with those wastes listed solely because they exhibit one or more hazardous waste characteristics even if the resultant mixture no longer exhibits any hazardous waste characteristics. Phelps Dodge provided comments regarding the change in its comments to the Supplemental Rules, but EPA needs to address this issue in this rulemaking as well, given its reproposal of the mixture rule, and because EPA failed to discuss the changes to (a)(2)(iii) in the Supplemental Rule preamble.

Agency Response:

The commenter's concerns about mineral processing wastes and the Bevill mixture rule were addressed in EPA's Supplemental Phase IV LDR Final Rule [63 F.R. 28595-97 (May 26, 1998)] which included discussion of mineral processing secondary materials and Bevill Exclusion issues.

Issue Code: MISC6: Need to be able to Remove “Pass-through” Codes from Wastes

Comments: WHWP-00053, 1, 4

Comment Summary:

The Agency received one comment from Systech Environmental in response to the 1995 HWIR proposal concerning pass-through waste codes. A summary of the specific issues raised by the commenter is provided below.

Systech noted that the proposed rule did not provide a clear ability to remove the so-called pass-through codes that attach merely because a waste passes through a container or vessel that had contained another waste previously. The commenter believed this was important for tanks since the determination of a RCRA-empty tank was not defined as clearly as for containers. Attachment of pass-through codes often limits the options that are available to a generator to manage his waste in the most efficient and economical manner possible while still being protective of human health and the environment.

Agency Response:

The determination of “RCRA-empty” is not part of the regulatory changes finalized in this rulemaking, and therefore, such comments are outside the scope of this action related to revisions of the mixture and derived-from rules.

The exclusion of residues of hazardous waste in empty containers found in 40 CFR 261.7 does not apply to tanks as defined 40 CFR 260.10. If a tank contains a residue of a listed hazardous waste, and that residue is mixed with another waste that passes through subsequently, the resulting mixture is also a hazardous waste. For the reasons explained in response to comment issue MDF2 (Necessity of the Mixture and Derived-from rules), and in particular considering the large volumes of waste managed in tanks, EPA believes that continued regulation of such mixtures is necessary for protection of human health and the environment.

Issue Code: MISC7: Epinephrine should not be Regulated as a Hazardous Waste

Comments: WHWP-00129, 1,2; WHWP-00160, 2,2; WHWP-00160, 8, 1;
WHWP-00160, 13,2; WHWP-00160, 21,1; WHWP-00160, 22,2;
WHWP-00160, 24,1; and WHWP-00188, 1,1

Comment Summary:

The Agency received comments from three commenters in response to the 1995 HWIR proposal concerning the regulation of epinephrine. A summary of the specific issues raised by the commenters is provided below.

Capital Returns, National Wholesale Druggists Association and American Society of Health-System Pharmacists (ASHP) argued that the regulation of epinephrine as a listed hazardous waste, when discarded under RCRA's commercial chemical product provisions, imposes significant, unduly burdensome, and wholly unwarranted requirements. Capital Returns believed that this regulation was inappropriate because EPA simply does not have information to support regulating epinephrine as a hazardous waste. The commenters noted that because it must be injected or specifically applied, epinephrine does not pose a substantial threat to human health or the environment. Capital Returns added that by failing to undertake a risk assessment for epinephrine under HWIR, EPA has failed in the context of the HWIR proposal to demonstrate that epinephrine poses a substantial risk.

Capital Returns also argued that requiring compliance with the LDR treatment standards for epinephrine to exit Subtitle C would be especially inappropriate because the LDR standards are based on technological considerations that have nothing to do with risk, even though risk is the only relevant consideration in determining whether a waste should be classified as hazardous. In addition, satisfaction of the LDRs before exit imposes needless, burdensome hazardous waste regulation on epinephrine.

Agency Response:

These comments are out of the scope of today's rulemaking. The Agency is not revisiting the basis for any particular listing contained within Subpart D of 40 CFR 261, but instead is revising the mixture and derived-from rules that identify hazardous mixtures and residuals that derive from these listed wastes.

The Agency has an on-going effort to reconsider chemicals found on Appendix VIII of 40 CFR 261, "Hazardous Constituents." This effort is described in the regulatory agenda as the RCRA Appendix VIII Streamlining (see 65 FR 23551 April 24, 2000). As part of this effort the Agency "will delete those chemicals for which the risk from potential exposure is considered to be minimal." If epinephrine is removed from Appendix VIII, then the Agency could have a firm basis to delete the P042 listing for this chemical, as advocated by these commenters.

Issue Code: MISC8: Totals LDR Standard for Arsenic in K088 cannot be met in Treated Waste, even when the Untreated Waste did meet the Standard

Comments: WH2P-00006, 3, 3; and WH2P-00015, 3, 1

Comment Summary:

The Agency received two comments from waste management companies in response to the 1999 HWIR proposal concerning the LDR standard for arsenic in K088. A summary of the specific issues raised by the commenter is provided below.

Waste Management and Onyx Environmental Services noted that EPA's establishment of a standard for arsenic as a totals concentration for K088 has caused subsequent management problems due to the mixture and derived-from (MDF) rules. The commenters believed that EPA recently became aware of problems arising when a waste stream carried total arsenic above the standard. In fact, incinerator ash from the treatment of mixtures of waste containing K088 are not meeting the total arsenic standard despite the fact that the untreated K088 did meet the standard. As a result, these derived-from wastes cannot be land disposed without undertaking a lengthy process for a treatability variance. The commenters requested that EPA consider addressing this problem in two ways: (1) by amending the MDF rules so that an LDR based on total concentrations is not carried through to a treatment residual if the original waste met the LDR standard; and (2) by allowing the residue to meet the TCLP arsenic standard.

Agency Response:

In response to a D.C. Circuit Court opinion that held that EPA arbitrarily relied on an inaccurately predictive model (the TCLP) in promulgating the original K088 treatment standard, the Agency promulgated a revised standard for arsenic in non-wastewater forms of K088, based on a total recoverable arsenic concentration (63 FR 51257 September 24, 1998). This ruling precludes one commenter's suggestion that K088 residue be evaluated with the TCLP arsenic standard.

A subsequent proposal revisited the treatment standards for non-wastewater K088 and proposed changes to the standards for cyanide and fluoride (65 FR 42938 July 12, 2000). This action considered but did not propose to modify the arsenic standard for K088. "The development of a revised arsenic treatment standard in this proposal proved problematic for two reasons: [(1) the waste] ... could not be considered difficult-to-treat for BDAT purposes; [and (2)] ... the arsenic was not immobilized in the treated potliner." (65 FR 42944 July 12, 2000). The Agency proposed to keep the arsenic standard based on total recoverable arsenic, and emphasized the opportunity for generators to petition for a variance from the current treatment standard. The Agency specifically referenced the instance in which residuals from treatment contained arsenic levels above the current standard, and that such exceedences would not preclude such treatment from obtaining the necessary variance.

In support of the viability of such treatability variances, the Agency references a recently issued

variance to Safety Kleen specifically because the waste could not be treated to the K088 total arsenic standard of 26.1 mg/kg. Safety Kleen was able to demonstrate that their waste was significantly different, both physically and chemically, from the waste used to set the K088 treatment standard, and therefore qualified for a variance. (65 FR 45978 July 26, 2000).

In the current regulation revising the mixture and derived-from rules, the Agency does not believe it appropriate to modify the derived-from rule to remove the LDR requirement and its total arsenic standard from residuals of treated K088. Residuals of treated K088 are potentially of concern to human health and the environment, and therefore are properly retained within the hazardous waste system. Instead, the Agency seeks to gather data on the effectiveness of current arsenic treatment methods and potentially modify K088 treatment standards for arsenic, as warranted. (See discussion 65 FR 42945 July 12, 2000).

Issue Code: MISC9: EPA Should Develop Risk-based LDRs

Comments: WHWP-00017, 2,3; 18,2; WHWP-00141, 5,3; WHWP-00191, 16,2; WHWP-00191; and WH2P-00007, 6, 2;

Comment Summary:

The Agency received comments from four commenters in response to both the 1995 and the 1999 HWIR proposals concerning the development of risk-based LDR treatment standards. Of those comments one was from a Federal Agency, one was from an industry association, one was from an industry, and one was from a waste management company. A summary of the specific issues raised by the commenters is provided below.

The Department of Energy (DOE) believed that as long as LDR treatment standards remained technology-based rather than risk-based, requiring de-characterized mixtures and residuals to meet LDR treatment standards could force treatment that is not necessary to minimize threats to human health or the environment. The commenter urged EPA to move forward with development of risk-based LDR treatment standards as expeditiously as possible.

Shell supported the use of risk-based LDR treatment levels only where those levels are achievable through available technology. The commenter noted that there was no incentive to treat a waste to a "risk based" exit level, if after treatment, it must be further treated to meet a "technology based" level. The commenter also believed that risk based levels should be utilized where they are greater than technology based standards.

Heritage Environmental and the National Association of Metal Finishers supported EPA's move toward risk-based LDRs. This approach only makes sense as EPA continues to develop better, more sophisticated methods of estimating risk. Development of more reasonable risk-based LDR treatment standards to replace the technology- derived treatment standards will allow industry to concentrate its compliance resources on more cost-effective means of protecting the environment.

SOCMA and Missouri encouraged EPA to develop a contingent management mechanism. SOCMA believed that a contingent management approach could facilitate flexibility and promote greater reuse and recycling of valuable material that presently is precluded from recycling due to the structure of the hazardous waste regulations. SOCMA provided an example of the difficulty that companies have engaging in productive recycling activities under the current regulatory scheme. The company desired to recycle the solvent-dissolved product back into the raw material tank where it could then be reprocessed (distilled) into a useable product again, rather than being disposed of by being sent off-site as a hazardous waste. Under the current regulations, he was obliged to manage the solvent-dissolved product as a hazardous waste.

Agency Response:

EPA continues to support the goal of risk-based LDR treatment levels. Currently the state of the

science precludes us from setting such levels, but as we continue to develop the HWIR exemption, we may also further develop a possible approach to setting risk-based LDR treatment levels. Such levels, of course, would have to be of sufficient stringency to assure that threats to human health and to environment posed by land disposal of the wastes are minimized. RCRA section 3004 (m) (1). In addition, EPA will continue to explore contingent management mechanisms as it has done in recent rulemakings. The specific suggestion provided by the commenters is beyond the scope of this rulemaking, and EPA has not been able to evaluate the suggestion during the development of today's rule.

Issue Code: MISC10: The Proposal Does not Create any Incentives for Recycling

Comments: WH2P-000023, 2, 2

Comment Summary:

The Agency received one comment in response to the 1999 HWIR proposal concerning the creation of recycling incentives. A summary of the specific comment is provided below.

The National Oil Recyclers Coalition was concerned that the proposal failed to create any incentives for recycling. The commenter believed that legitimate recycling preserves natural resources and often saves vast quantities of energy. Therefore, incentives to exit the hazardous waste regulatory program that promote legitimate recycling always should be considered when EPA undertakes a rulemaking under RCRA.

Agency Response:

EPA appreciates the comment in support of recycling incentives, and agrees that recycling is an important part of resource conservation. However, specific recycling incentives are not part of the regulatory changes finalized in this rulemaking, and therefore, such comments are outside the scope of this action related to revisions of the mixture and derived-from rules. For further discussion of recycling incentives, please see EPA's response to comment MISC15.

Issue Code: MISC11: EPA Should Renounce its Position on the Application of the Mixture Rule to the K170 Listing

Comments: WH2P-00031, 2, 6

Comment Summary:

The Agency received one comment from the American Petroleum Institute (API) in response to the 1999 HWIR proposal concerning the application of the mixture rule to the K170 listing. A summary of the association's comment is provided below.

API argued that in the hazardous waste listing rule for petroleum refinery clarified slurry oil storage tank sediment (K170) and subsequent litigation, EPA claimed that the mixture rule allowed it to classify as a listed hazardous waste residues from the lawful mixing of products if one of those products is a precursor to a listed waste. This is allowed despite the fact that the mixture rule is expressly limited to mixtures of solid wastes and listed hazardous wastes. The commenter believed that EPA had no justification for this position, other than the Agency's apparent speculation that some generators might attempt to evade an eventual listing by blending products prior to the generation of any wastes. This unprecedented interpretation could increase vastly the potential scope of the already over-broad mixture rule, and could extend the Subtitle C program far upstream in the production process to regulate materials that have not even become solid wastes, let alone hazardous wastes under RCRA. The commenter urged EPA to renounce this untenable assertion.

Agency Response:

EPA sees no reason to change a position that has already been upheld by the U.S. Court of Appeals. The position upheld in *API v. EPA*, 216 F.3d 50 (D.C. Cir. 2000) continues to be the correct interpretation of the Agency's regulations. There can be no revisiting of that decision in this rule and API has no right of further judicial review of that position should it file a litigation challenge to this rule. Furthermore, API's view that the K170 interpretation would allow the Agency to regulate upstream material that is not even a solid is plainly incorrect. Nothing the interpretation would allow the Agency to regulate any mixture material as a hazardous unless a hazardous waste is present in the mixture.

If a refinery believes that its mixture of CSO sediment and non-CSO product sediment is not hazardous under RCRA, the refinery can petition under 40 CFR § 260.22 to delist that particular waste. If EPA develops a constituent-based exemption, such an exemption would refine the regulation of hazardous waste. Under such an exemption, a mixture of CSO sediment and non-CSO product sediment may be able to exit 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: MISC12: EPA Should Revise the Test Method for Cyanide

Comments: WHWP-00192, 9, 1

Comment Summary:

The Agency received one comment from the National Coil Coaters Association in response to the 1995 HWIR proposal concerning the revision of the test method for cyanide. The association's comment is provided below.

“In some cases, however, even when cyanide is not used anywhere in a particular coil coaters' process, the test method for cyanide results in "false positives" for cyanide. EPA should revise the test method for cyanide to eliminate this problem.”

Agency Response:

The Agency's test method for cyanide is not part of the regulatory changes finalized in this rulemaking, and therefore, such comments are outside the scope of this action related to revisions of the mixture and derived-from rules.

The Agency's current method for cyanide (Method 9010B) measures total and amenable cyanide and discusses potential interferences that might result in high results (e.g., for samples that contain nitrate and/or nitrite). Commenters should review this discussion contained within Method 9010B of SW-846. The Agency does acknowledge in the discussion of an HWIR constituent-based exemption in the 1999 HWIR Federal Register notice that there are complications associated with the chemical analysis of cyanide brought on by significant interferences (64 FR 63440 November 19, 1999).

To the extent that generators seek to establish that certain listed wastes (in this case, F019) or mixtures or residuals from such waste do not contain cyanide and therefore might appropriately be managed outside the hazardous waste system, then such generators need to pursue a delisting under the petition process described at 40 CFR 260.22. To date, the delisting program has provided specific exclusions for over 20 waste streams that carried the F019 code. Be aware, however, that the determination that an F019 waste stream should be delisted hinges not only on the presence or absence of cyanide, but also on an evaluation of all constituents of concern in the waste. The identification of these constituents is discussed in Section 6.1 of the most recent guidance manual for delistings (See “EPA RCRA Delisting Program: Guidance Manual for the Petitioner,” March 23, 2000).

Issue Code: MISC13: EPA Should Modify their Rules to Make their Intent Clear

Comments: WHWP 00035, 2,3; WHWP-00035, A2, 2;
WHWP-00053, 2,1 and WHWP-00084, 5,3

Comment Summary:

The Agency received three comments in response to the 1995 HWIR proposal concerning the clarity of rule modifications. A summary of the specific issues raised by the commenters is provided below.

Caufield Enterprises believed that EPA should modify the rules to make their intent clear and not depend on policy memorandums and other policy directives. Regulated businesses don't have the staff, time or means to research every issue for all the policies, many of which may not even be readily available. The rule needs to make clear what is necessary for compliance at minimum cost. The commenter noted that EPA staff had referred them to a rule preamble more than 20 years old. The commenter was able to find the Federal Register in the McGeorge School of Law Repository, however, this type of information isn't readily available to the public. Caufield Enterprises also argued that the rule was difficult to comment upon and should be reissued with specific questions identified.

The American Institute of Chemical Engineers believed that the requirements should be written in a manner that can be readily understood by the entities to whom it is directed. Systech noted that there were inconsistencies in the language of the rule. The commenter added that sometimes the Agency used land treatment units, while in other places land application was referenced. Systech believed that EPA needs to be careful in the terminology used.

Agency Response:

EPA appreciates the comments and is continuing to work on writing preamble and rule language in a clear, straightforward manner. For example, in the 1999 HWIR proposal we did identify a list of specific questions to help solicit public comments. We plan to continue this initiative to write in plain language in all our rulemakings, and appreciate the specific comments to help us do so.

Issue Code: MISC14: PCBs Should be Regulated Exclusively Within the TSCA Program

Comments: WHWP-00079, 2,2; WHWP-00079, 3,2; WHWP-00089, 58,1;
WHWP-00108, 23,3; WHWP-00193, 24,3; WHWP-00199, 3,4;
WHWP-00220, 7,1; and WHWP-00239, 9,2

Comment Summary:

The Agency received comments from approximately seven commenters in response to the 1995 HWIR proposal concerning the regulation of PCBs. Of those comments, two were from industries, four were from utility companies/associations, and one was from an industry association. A summary of the specific issues raised by the commenters is provided below.

The commenters believed that the management and disposal of PCB waste established under TSCA is fully protective of human health and the environment. Therefore, the regulation of the management and disposal of PCBs should remain exclusively within the TSCA program, and should not be subject to regulation under RCRA.

The PCB Consensus Group noted that for nearly twenty years, the TSCA PCB program has developed and set standards for the disposal of PCBs. The Group also noted that this regulatory scheme was unique in that it governs the disposal of a chemical whose manufacture has been banned, in contrast to waste materials that are regulated under RCRA. Since the amount of PCBs to be disposed is continually declining, new or modified controls on PCB disposal should be structured to expedite rather than impede disposal in an environmentally sound manner.

Agency Response:

In the 1995 HWIR Proposal, it was not the Agency's intention to undermine TSCA's management of PCB disposal or to alter the established regulatory programs governing wastes containing PCBs. Nor did the Agency intend to develop new regulatory requirements inconsistent with standing EPA requirements that regulate the disposal of PCBs. The 'exit levels' for PCBs that were provided in the 1995 HWIR Proposal were derived from modeling efforts conducted to support the proposal. Modeling for HWIR included PCBs because of their inclusion in Appendix VIII of 40 CFR Part 261, "Hazardous Constituents." Today's final rule does not in any way affect PCB disposal regulated under RCRA or TSCA.

Issue Code: MISC15: EPA Should Promulgate Conditional Exemptions for Recyclable Materials

Comments: WHWP-00124, 3,2; WHWP-00120, 10,1
WH2P-000035, 21, 1; and WHWP-00034, 3,6

Comment Summary:

The Agency received comments from four commenters, including two waste management companies, one industry association and one State government in response to both the 1995 HWIR proposals concerning exclusions for recyclable materials. A summary of the comments is provided below.

Safety-Kleen and Molten Metal Technology (MMT) believed that EPA should establish conditional exemptions from the Definition of Solid Waste (DSW) for recyclable materials that are managed and recycled in accordance with specified conditions. Safety-Kleen believed that EPA should provide conditional exclusions to the definition of solid waste in 40 CFR 261 (40 CFR 261.6 and 261.4(a)) for those materials destined for recycling.

Safety-Kleen noted that this would significantly reduce the complexity for a contingent management approach for exit. Specifying that a material is outside the definition of solid waste when it is properly recycled will create incentives for generators to recycle their wastes. On the other hand, by keeping these wastes in the system, failing to consider recycling as a method which qualifies for contingent management, and requiring constituent-by-constituent analysis, the EPA would be creating disincentives for recycling. The commenter noted that recycling of spent and discarded materials keeps materials out of land disposal, and reduces dependency upon raw materials. The commenters also noted that EPA should use its authority to establish conditional recycling exemptions to promote the Pollution Prevention Act waste management hierarchy which favors prevention and recycling over treatment and disposal.

MMT urged EPA to take this opportunity to establish a preference for, non-risk based conditional exemptions for recycling. This approach would have the dual benefit of effectively encouraged waste minimization/recycling efforts, while at the same time avoiding the many difficulties that seem to be associated with the current state of the science of risk assessment. In fact, a contingent management approach for encouraging recycling under RCRA could probably be implemented in a way that eliminated all important risk pathways, thereby eliminating the need for reliance on a multipathway risk analysis.

MMT recognized that certain conditions or restrictions -- some industry specific - may be required to ensure legitimate recycling. For example, particular attention should be paid to sham recycling issues, management standards, storage issues, and toxics along for the ride (TARS). EPA might consider including such conditions as: no land storage of recyclable materials; formal, written demonstration to the appropriate regulatory authority that legitimate recycling occurs; demonstration that products meet standard specifications and contain no TARS; and specific demonstrations that the recyclable materials contain appropriate quantities of recoverable

constituents.

SOCMA and Missouri encouraged EPA to develop a contingent management mechanism to address recycling. SOCMA believed that a contingent management approach could facilitate flexibility and promote greater reuse and recycling of valuable material that presently is precluded from recycling due to the structure of the hazardous waste regulations. SOCMA provided an example of the difficulty that companies have engaging in productive recycling activities under the current regulatory scheme. The company desired to recycle the solvent-dissolved product back into the raw material tank where it could then be reprocessed (distilled) into a useable product again, rather than being disposed of by being sent off-site as a hazardous waste. Under the current regulations, he was obliged to manage the solvent-dissolved product as a hazardous waste.

Agency Response:

EPA agrees with the commenters that environmentally sound recycling and waste minimization efforts should be encouraged. However, specific recycling incentives were not part of the regulatory changes finalized in this rulemaking. Therefore, such comments are outside the scope of this action, which is concerned with revisions of the mixture and derived-from rules. In addition, the Agency notes that the existing regulatory structure (including guidance and regulatory interpretations) of exemptions and variances from the definition of solid waste allow regulatory authorities to consider (on a case-by-case basis) many or most of the conditions suggested by the commenters, such as whether or not materials are placed on the land, whether they are managed to minimize loss, or whether there are “toxics along for the ride.”

Issue Code: MISC16: EPA Should Use of the Higher of the Two Numerical LDR Values

Comments: WHWP-00073, 101,4

Comment Summary:

The Agency received one comment from CMA in response to the 1995 HWIR proposal concerning LDR values. The association's comment is provided below.

EPA has, with a few exceptions, revised the LDR program so that all constituents, regardless of waste code, have the same treatment levels. The larger problem is that different waste matrices have different treatability capabilities either in actuality, due to chemical complexing, or empirically, due to analytical problems. In the case where the same constituent occurs in two different waste codes, thereby giving two different treatment levels, EPA should allow the use of the higher of the two numerical values, since these numbers are based on minimize threat levels.

Agency Response:

EPA's establishment of the Universal Treatment Standards (UTS) is not related to the regulatory changes finalized in this rulemaking, and therefore, such comments are outside the scope of this action related to revisions of the mixture and derived-from rules. We do note that, as explained in the Land Disposal Restrictions Phase II final rule (59 FR 47988, September 19, 1994), EPA promulgated a single universal treatment standard for each constituent regardless of the hazardous waste containing the constituent as a way of making the program more straightforward. If it is not physically possible to treat the waste to the level specified in the treatment standard, or by the method specified the generator or treater may petition for a variance from the treatment standard in accordance with 40 CFR 268.44.

Issue Code: MISC17: EPA Should Exclude Distilled Spirits from RCRA Regulation

Comments: WHWP-00016, 1,2

Comment Summary:

The Agency received one comment from the Distilled Spirits Council in response to the 1995 HWIR proposal requesting an exclusion for distilled spirits from RCRA regulation. The association's comment is provided below.

"We understand that the primary purpose of the proposals in this rulemaking is to address possible exit criteria for listed wastes. DISCUS submits that unlisted characteristic waste streams also should benefit from the same public policy considerations expressed in these proposals. Therefore, we recommend that EPA expressly exclude distilled spirits from RCRA regulation.

Distilled spirits are a food under the Food, Drug, and Cosmetic Act. Pursuant to applicable RCRA regulations, however, certain distilled spirits exhibit the characteristic of ignitability because of the presence of ethanol in these products. As a result and notwithstanding the fact that distilled spirits are intended for human consumption, they require management as a hazardous waste when discarded.

In addition to their unique status of being both fit for human consumption and deemed a "hazardous waste," distilled spirits also are extensively regulated by the Bureau of Alcohol, Tobacco and Firearms (BATF) pursuant to Subtitle E of the Internal Revenue Code, 26 U.S.C. Section 5001 et seq., and the Federal Alcohol Administration Act, 27 U.S.C. Section 201 et seq. Producers of distilled spirits may operate only under permits issued in accordance with the Federal Alcohol Administration Act. Careful production records also must be kept pursuant to the requirements of Title 27 of the Code of Federal Regulations, including records of breakage, loss and disposal, because of federal tax implications. See, e.g., 27 C.F.R. Part 19.

Distilled spirits products may need to be disposed of due to, for example, mislabeling, discontinuation of a product line, or excessive age. In each instance, the discarded product still is potable and disposal records are maintained to satisfy BATF requirements. Further, ethanol is totally miscible in water and disperses rapidly. Ethanol, diluted, rapidly biodegrades to carbon dioxide and water.

The potential ignitability of discarded distilled spirits results from the presence of ethyl alcohol. Distilled spirits are not a listed hazardous waste, and they have no underlying hazardous constituents. As stated above, the ignitability characteristic is effectively and efficiently deactivated through dilution because ethanol is totally miscible with water. In addition, ethanol aqueous solutions of an alcohol content below 24% alcohol by volume are not regulated under RCRA. (40 C.F.R. Section 261.21(a)(1).)

EPA's position in this rulemaking represents sound public policy to reduce or eliminate

unnecessary or duplicative regulatory requirements. In determining whether a need exists for RCRA regulation, DISCUS supports EPA's concept of contingent management that considers the presence of alternative controls and procedures that are protective of public health and the environment which are used to manage particular waste streams for reasons other than RCRA regulation. We submit that the extensive controls maintained by BATF already provide commensurate protection for public health and the environment against mismanagement of discarded distilled spirits and against any fire hazard. Thus, additional regulation of distilled spirits under RCRA is both unnecessary and duplicative.

In the era where each federal agency is revisiting its regulatory scheme to ensure it meets its intended purpose, we appreciate that EPA is reviewing the scope of RCRA regulations to that end. For the reasons proffered, we urge the Agency to exclude distilled spirits as a "hazardous waste." Distilled spirits are unique in that they are the only product that can be ingested yet are deemed a "hazardous waste" when discarded. Both common sense and fundamental facts dictate the exclusion of distilled spirits from the RCRA scheme.”

Agency Response:

The consideration of a potential exclusion for discarded distilled spirits is outside the scope of this rulemaking. The revisions to the mixture and derived-from rules promulgated in this action affects listed hazardous waste in contrast to the characteristically ignitable wastes being discussed in this comment.

The Agency agrees that materials destined for disposal and exhibiting the characteristic of ignitability would be considered hazardous wastes and must, therefore, be managed accordingly. Unlike listed hazardous waste, characteristic waste can be “de-characterized” to remove the characteristic, meet the appropriate treatment standards, and then be managed in a non-hazardous unit. The use of dilution as a means of deactivating a characteristically hazardous waste is described in 40 CFR 268.3(b). Treatment standards for such wastes can be found in 40 CFR 268.40. Note particularly the obligation to meet Universal Treatment Standards for all underlying hazardous constituents as described in 40 CFR 268.40(a) and (e). The exit from the hazardous waste system for de-characterized waste is described in 40 CFR 261.3(d)(1) with the caveat that wastes that exhibited a characteristic at the point of generation may still be subject to treatment standards under 40 CFR 268 even if they no longer exhibit the characteristic at the point of land disposal.

The Agency has stated a willingness, where warranted, to craft exclusions and to modify management requirements for particular types of wastes. In particular, the Agency has altered such requirements when adequate protections exist within other regulatory programs. (For example, the storage of certain types of waste non-chemical military munitions are exempt from RCRA storage requirements because such wastes were determined to be adequately regulated by the Department of Defense’s Explosive Safety Board storage standards (62 FR 6636 February 12,

1997)). However, such consideration requires an evaluation of these alternative requirements, which has not been done for the Bureau of Alcohol, Tobacco, and Firearms (BATF) regulations. In addition, an analysis must be conducted to confirm that these alternative regulatory requirements address RCRA concerns about the storage, treatment, and disposal of waste materials. (EPA also notes that it has already exempted from regulation industrial ethyl alcohol being reclaimed, due to the comprehensive BATF regulatory structure for such reclamation activity. See 261.6 (a) (3) (1).)

Finally, the designation of ignitable wastes as hazardous stems from the Agency's interest in identifying those wastes capable of causing fires during routine transportation, storage and disposal or of exacerbating a fire once started (45 FR 33108 May 19, 1980). While distilled spirits may be designed for human consumption, their management upon discard raises these legitimate concerns and therefore such substances, without deactivation and perhaps additional treatment, are appropriately designated as hazardous waste.

Issue Code: MISC18: Biological Toxins May or May not be Medical Wastes if they Occur Naturally

Comments: WHWP-00054, Cvr

Comment Summary:

The Agency received one comment from a citizen in response to the 1995 HWIR proposal regarding biological toxins. The citizen's comment is provided below.

Toxic wastes, not specifically identified, present horrendous hazards. Hunta, Ebola, botulism toxin all present unaddressed dangers. Biological toxins may or may not be medical wastes if they occur naturally.

Agency Response:

Infectious wastes may present public health hazards, however, with the exception of regulating air emissions from hospital/medical/infectious waste incinerators under the Clean Air Act, EPA does not regulate these wastes. They are regulated only at the State level.

The issue raised by this comment are outside the scope of the 1995 and 1999 proposals and today's rule. Infectious and medical wastes are not addressed by the Resource Conservation and Recovery Act .

Issue Code: MISC19: EPA should Exempt Wipers Containing De Minimis Amounts of Listed Solvents from the Subtitle C Regulatory System

Comments: WHWP-00012, 1,5 and WHWP-00114, 4,2

Comment Summary:

The Agency received two comments in response to the 1995 HWIR proposal requesting an exemption for wipers containing de minimis amounts of listed solvents from Subtitle C regulation. Of those comments, one was from an industry and the other was from an industry association. A summary of the comments is provided below.

Kimberly-Clark urged EPA to exempt wipers containing de minimis amounts of listed solvents from the Subtitle C regulatory system. The commenter believed that the exemption should include wipers, both disposable and reusable, which are contaminated with de minimis amounts of commonly used, listed solvents, in RCRA. Because the proposed HWIR is intended to address the general issue of exempting low-risk listed wastes from the full range of Subtitle C requirements, the commenter believed it was appropriate to deal with this issue within the context of the HWIR rulemaking.

Kimberly-Clark noted that the listed solvents most commonly used (i.e., acetone, xylene, methyl ethyl ketone ("MEK") and toluene) are highly volatile and evaporate off the wipers in a matter of hours; in fact, most solvents evaporate more rapidly. Consequently, there is in fact virtually no listed solvent on the wipers when they are subjected to treatment or disposal. Second, as noted by EPA in the 1992 HWIR proposal, the total volume of solvent in wipers under the most conservative assumptions is truly de minimis. Third, wipers are a high-volume, low-risk waste. The truly de minimis quantity of solvents involved at the time of disposal assures that disposal in secure, solid waste landfills will provide a sufficient and appropriate level of protection for human health and the environment.

Kimberly-Clark also noted that the States and EPA Regional Offices vary significantly in the interpretation and application of existing regulations regarding wipers containing de minimis amounts of solvents. As a consequence, there has not been uniform interpretation or implementation of the regulations, resulting in considerable confusion within the regulated community. The commenter believed that there has been no substantive disagreement to the proposal to exempt wipers containing de minimis amounts of listed solvents from the Subtitle C program has been raised. This is explained by the fact that these wipers are not hazardous in fact when disposed of in landfills. Indeed, the only opposition has been from commercial treatment, TSDFs, who have a financial interest in maintaining the current scheme, and one environmental lobbyist, who recommended that this issue not be divorced from the larger HWIR rulemaking effort.

Kimberly-Clark also suggested that the HWIR exit criteria should apply to solvent-contaminated wipers, but the proposed testing and notification provisions serve no useful purpose with regard to wipers and should not be applied. The commenter noted that data previously provided to the

Agency indicated that wipers containing de minimis amounts of commonly used, F-listed solvents in the service and industrial sectors satisfy proposed HWIR exit levels. These data support the development of a list of designated "commonly used" solvents for which no testing to demonstrate compliance with HWIR exit level would be required. The list of "commonly used" solvents should also be readily expanded whenever data on an F-listed solvent shows that the concentration on wipers which do not contain free liquid solvents is below the generic exit levels in the rule.

Kimberly-Clark believed that wipers which are "visibly contaminated," i.e., contain free liquid solvents, and wipers which are not "visibly contaminated" but which contain solvents which have not been designated as "commonly used" would exit the Subtitle C system only by the mechanisms available under delisting or the generally applicable terms of the final HWIR. In contrast, wipers which are not "visibly contaminated" and which contain only designated "commonly used" solvents would exit the Subtitle C system under the proposed HWIR standards subject to modified implementation requirements. Consistent with the terms of the HWIR, all generators of wipers containing any listed solvents, including those designated as "commonly used," should determine whether the wipers exhibit a characteristic either through testing or knowledge of the waste, as presently set out in 40 C.F.R. Section 262.11(c), prior to handling the waste as nonhazardous.

Testing should not be required for those wipers which contain only designated "commonly used" listed solvents not present as free liquids for which EPA has data from Kimberly-Clark or other sources indicating that such wipers fall below applicable exit levels under the proposed HWIR exit levels. Generators should be able to use knowledge that their wastes fall below exit levels based on data provided to EPA by others so long as the wipers contain no free liquids (as determined by a simple manual wringing test) at the time they are sent for disposal. Testing would be required only in those instances where the wipers contain free liquids or listed solvents for which no data has been provided to EPA.

Electronic Industries Association (EIA) noted that rags and wipes pose minimal risk to the environment. Also, these wastes are routinely managed in an environmentally safe manner, including such measures as the covering of containers during accumulation, compliance with regulatory requirements during laundering, and the cleansing of reusable textiles before they are discarded. Because rags and wipes are generated at a wide range of locations in a facility, EIA believed it would be infeasible to sample and test these wastes at each of the multiple points of generation. The commenter suggested that the Agency expand the definition of "point of generation" to include the "area of accumulation" for rags and wipes, and other appropriate actions to ensure that rags and wipes may be realistically covered by the rule.

Agency Response:

EPA agrees that there may be merit in developing a set of tailored regulations for solvent-

contaminated shop towels and wipes, and is pursuing such an effort under a separate rulemaking effort. For more information, please see the related discussion the *April 2000 Agenda of Regulatory and Deregulatory Actions* (65 FR 23554).

Issue Code: MISC20: EPA Should Exempt Printed Wiring Board Wastewater Sludge

Comments: WHWP-00083, 5,1

Comment Summary:

The Agency received one comment from IPC in response to the 1995 HWIR proposal requesting an exemption for wastewater sludge that results from the manufacture of printed wiring boards (PWBs). The association's comment is provided below.

“It is IPC's position that the wastewater sludge that results from the manufacture of printed wiring boards (PWBs), which is currently classified by EPA as an F006 hazardous waste, is not waste. Rather, IPC contends that this material is a valuable by-product of the manufacturing process, which can be recycled into copper as well as other metals. As a result, IPC believes that this material should not even be subject to EPA's regulatory authority. Nevertheless, for purposes of the general HWIR, IPC is submitting these comments as the proposed rule could apply to the PWB wastewater sludge which EPA currently classifies as F006.”

Agency Response:

Revisiting the F006 listing is not part of the regulatory changes finalized in this rulemaking, and therefore, such comments are outside the scope of this action related to revisions of the mixture and derived-from rules.

However, it should be noted that the Agency has taken a serious look at the F006 listing as part of EPA's Common Sense Initiative (CSI) for the Metal Finishing Industry. The goal of the CSI was to use multi-stakeholder consensus decision-making to recommend policy and program changes to EPA. Specifically, under CSI, multi-stakeholder groups looked for cleaner, cheaper, and smarter opportunities for environmental protection in the metal finishing industry sector. As part of this effort, EPA undertook the Metal Finishing F006 Benchmark Study (September, 1998) to see whether the physical nature of F006 waste had changed since it was first listed and if so, whether some type of relief for the management of F006 waste was warranted. As a follow-up to that work, the Agency published a final rule on March 8, 2000 (65 FR 12378) that allowed large quantity generators of F006 sludges up to 180 days accumulation time provided the generators recycle the F006 through metals recovery and meet other conditions.

The Agency is continuing its F006 initiatives by identifying additional data needs and examining potential regulatory and administrative strategies that may promote metals recovery of F006 waste, encourage pollution prevention practices related to the generation of F006 waste, and reduce or remove possible RCRA barriers to metals recovery of F006 waste. F006 has also been the focus of a number of EPA's site-specific Project XL (eXcellence and Leadership) reinvention pilot projects.

Issue Code: MISC21: EPA Should Exempt Spill-related Wastes from Train Derailments

Comments: WHWP-00085, 30,4

Comment Summary:

The Agency received one comment from AAR in response to the 1995 HWIR proposal requesting an exemption for spill-related wastes from train derailments. The association's comment is provided below.

AAR recommends that wastes generated on a one-time basis, such as spill-related wastes or wastes from remediation of a train derailment, be exempt from all RCRA requirements for listed hazardous wastes.

Agency Response:

Wastes generated as a result of one-time events, such as train derailments, can still pose the same risk as any other hazardous waste, and therefore EPA does not support a blanket exemption for such wastes. However, since this comment was received in response to the 1995 HWIR proposal, EPA has published three Federal Register notices that address remediation wastes (including wastes from spills): HWIR-media proposed and final rules (61 FR 18779-18864, April 29, 1996 and 63 FR 65873-65947, November 30, 1998), and LDR Phase IV final rule (63 FR 28555-28604, May 26, 1998). In these rules, we addressed several issues associated with contaminated media. In the HWIR media rule, we addressed remediation waste management issues, including permits, the on-site storage of remediation wastes during cleanup and state authorization. As part of the LDR Phase IV final rule, we amended the treatment standards for soil contaminated with hazardous waste. We also note that previously promulgated exemptions in 40 CFR 270.1(c)(3) for activities taken during immediate response to a discharge (or immediate threat of discharge) of hazardous waste may also apply.

Issue Code: MISC22: Remediation Wastes Should Not Be Treated the Same as Process Wastes

Comments: WHWP-00084, 5,5 Industry Assn.

Comment Summary:

The Agency received one comment from the American Institute of Chemical Engineers (Institute) in response to the 1995 HWIR proposal requesting an exemption for remediation wastes. A summary of the association's comment is provided below.

The Institute believed that remediation wastes were unlike process wastes. Remediation often involves the management of a wide range of contaminated materials, including groundwater, soil, sediments, debris, urban fill (e.g., ash, cinders), sludges, slags, and various mixtures of these materials. Any of these materials may contain or may have been historically mixed with wastes that exhibit characteristics or are considered hazardous by regulations. In terms of volumes, generally these wastes contain a much larger fraction of non-hazardous wastes than hazardous wastes.

Despite the differences between remediation and process wastes, the current RCRA Subtitle C regulatory framework demands the same management practice for remediation wastes as it does for process wastes. Under RCRA's land disposal restriction (LDR) program, even very low-risk listed wastes must often be treated to constituent levels known as "universal treatment standards" (UTS). The UTS are not risk-based standards - they are based on what the "best demonstrated available technology" (BDAT) can achieve -and thus often necessitate treatment to levels far below what is necessary to protect human health. These provisions, as well as other elements of RCRA developed to promote waste minimization or to ensure protective management of process wastes, have proven to be serious impediments to remediation efforts.

A unitary program, where all remediation wastes managed under a Remediation Action Plan (RAP) would be exempted from Subtitle C, would be simple and would provide States the maximum flexibility in implementing and enforcing remediations. The Institute believed that remediation wastes should be removed from Subtitle C if they are managed under an enforceable EPA or state order and EPA or the state determines that the cleanup will be protective of human health and the environment. Such an approach would, abandon the current "one-size-fits-all" approach and allow EPA to address the most serious risks by focusing on the risks of various wastes and cleanup methods and prioritizing actions. It would rely on States' abilities to ensure that remediation wastes will not be mismanaged, thereby eliminating the need to identify those wastes as hazardous. Historically, the States have routinely made sensible and site-specific decisions regarding the management of non-hazardous remediation wastes; it should be noted that these non-hazardous remediation wastes are physically and chemically indistinguishable from the "hazardous" remediation wastes. Under this approach, remediation waste would be defined broadly to encompass those materials typically encountered in various remediation actions.

Agency Response:

EPA recognizes that contaminated media poses unique issues; these issues, however, are outside the scope of today's rulemaking. In 1993, EPA chartered a committee under the Federal Advisory Committee Act (FACA) to address issues relating to EPA's 1992 HWIR exemption proposal. One development from that process was that EPA separated issues concerning contaminated media and as-generated waste into two rulemaking efforts. Since the time this comment was submitted on the 1995 HWIR proposal, EPA has published three Federal Register notices regarding contaminated media: HWIR-media proposed and final rules (61 FR 18779-18864, April 29, 1996 and 63 FR 65873-65947, November 30, 1998), and LDR Phase IV final rule (63 FR 28555-28604, May 26, 1998). In these rules, we had looked closely at the issues associated with contaminated media. In the HWIR media rule, we addressed remediation waste management issues, including permits, the on-site storage of remediation wastes during cleanup and state authorization. As part of the LDR Phase IV final rule, we amended the treatment standards for soil contaminated with hazardous waste.

Issue Code: MISC23: EPA Should Address Mercury Contaminated Soil

Comments: WHWP-00224, 2,5

Comment Summary:

The Agency received one comment from the Chlorine Institute in response to the 1995 HWIR proposals requesting EPA address mercury contaminated soils. The association's comment is provided below.

The Institute is disappointed that EPA has not yet specifically addressed mercury contaminated soils in any of the proposed regulations to date. Even though contaminated media is discussed in the proposed rule, mercury contaminated soil is not currently addressed. The Institute encourages EPA to address this issue in the upcoming HWIR for contaminated media.

Agency Response:

EPA recognizes that contaminated media poses unique issues; these issues, however, are outside the scope of today's rulemaking. In 1993, EPA chartered a committee under the Federal Advisory Committee Act (FACA) to address issues relating to EPA's 1992 HWIR exemption proposal. One development from that process was that EPA separated issues concerning contaminated media and as-generated waste into two rulemaking efforts. Since the time this comment was submitted on the 1995 HWIR proposal, EPA has published three Federal Register notices that address contaminated media: HWIR-media proposed and final rules (61 FR 18779-18864, April 29, 1996 and 63 FR 65873-65947, November 30, 1998), and LDR Phase IV final rule (63 FR 28555-28604, May 26, 1998). In the HWIR media rule, we addressed remediation waste management issues, including permits, the on-site storage of remediation wastes during cleanup and state authorization. As part of the LDR Phase IV final rule, we amended the treatment standards for soils contaminated with hazardous waste, including soils contaminated with mercury. We also note that previously promulgated exemptions in 40 CFR 270.1(c)(3) for activities taken during immediate response to a discharge (or immediate threat of discharge) of hazardous waste may also apply.

Issue Code: MISC24: EPA Should Develop Exclusions Based on Risk for Characteristic Wastes

Comments: WHWP-00030, 2,3

Comment Summary:

The Agency received one comment from Costal Corp. in response to the 1995 HWIR proposal requesting an exclusion for characteristic wastes. The company's comment is provided below.

Coastal believes that similar exclusions based on risk could be allowed for characteristic wastes. The opportunity to exclude characteristic wastes treated on-site appears to be available in this rulemaking. Yet, listed hazardous wastes that exhibit any of the characteristics are excluded. If the EPA's intent is to truly exclude wastes being sent to landfills and yet offer protection to public health and the environment, it seems reasonable from a risk standpoint that proper on-site treatment of these characteristic wastes is less of a risk than transporting these wastes' long distances to landfills that later could become a CERCLA site.

Agency Response:

The consideration of additional exemptions for characteristic wastes is outside the scope of this rulemaking. The revisions to the mixture and derived-from rules affect listed hazardous waste in contrast to the characteristic wastes discussed in this comment.

Unlike listed hazardous waste, characteristic waste can be "de-characterized" to remove the characteristic, meet the appropriate treatment standards, and then be managed in a non-hazardous unit. The exit from the hazardous waste system for de-characterized waste is described in 40 CFR 261.3(d)(1) with the caveat that wastes that exhibited a characteristic at the point of generation may still be subject to treatment standards under 40 CFR 268 even if they no longer exhibit the characteristic at the point of land disposal.

Characteristic wastes are expected to be eligible for the concentration-based exemption discussed in the 1999 HWIR notice, provided that these wastes no longer exhibit a characteristic (64 FR 63449 November 19, 1999). This notice also discussed the possible implementation of risk-based levels in place of current numerical treatment standards within the Land Disposal Restriction (LDR) program (64 FR 63444). To the extent that such risk-based levels would require less treatment, then such revisions would address the commenter's stated interest in reduced management requirements based on risk.

Before we would promulgate a concentration-based exemption and changes to treatment standards that could affect characteristic waste, we would first publish a proposal that would include specific exemption levels and give the public an opportunity to comment.