

**HTRW Center of Expertise  
Environmental Regulatory  
Fact Sheet 00-03**

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**Hazardous Waste Identification Rule (HWIR): Identification and Listing of  
Hazardous Waste**

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On 19 November 1999, EPA proposed the Hazardous Waste Identification Rule (HWIR): Identification and Listing of Hazardous Waste, 64 Federal Register 63382. The EPA is, in essence, making two proposals with two separate suspenses for comments in this announcement.

This paper provides a brief summary of the second portion (Sections V to XX) of the rule, which relates to exemption levels below which wastes can be disposed of as non-hazardous. The purpose of the summary is to assist Army and DoD reviewers in determining whether the rule is applicable to their activities and whether they should review and comment on this rulemaking.

The first portion (Section I to IV) of this rule proposes to retain and amend the mixture and derived-from rules for hazardous waste. A summary of this portion of the rule is available at:  
[http://128.174.5.51/denix/DOD/Webnotes/show\\_index.cgi/denix/DOD/Working/working.html?dod.interact.groups.hwm.rule-making](http://128.174.5.51/denix/DOD/Webnotes/show_index.cgi/denix/DOD/Working/working.html?dod.interact.groups.hwm.rule-making).

Comments on the first portion are being accepted through 17 February 2000. Comments on the second portion are being accepted through 17 May 2000.

**BACKGROUND**

Under the current system of hazardous waste identification, listed wastes remain regulated as hazardous waste regardless of the concentration of the hazardous constituents remaining in the waste. The only way to exit Subtitle C (hazardous waste) regulation, even after treatment, is to individually petition EPA for an exemption on a case-by-case basis. This process, known as "delisting", can be time consuming and costly. As a result, generators often times do not pursue delisting even when the waste contains relatively low levels of contaminants.

EPA is now considering developing self-implementing regulations to allow low-risk wastes to become exempt from RCRA hazardous waste disposal requirements. Though this rulemaking is termed a "proposed rule", it does not actually propose exemption levels or implementing regulations. Instead, it discusses EPA's general approach for developing exemption levels and corresponding regulations. The actual exemption levels and regulations will be the topic of a subsequent proposed rule.

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**WHO SHOULD READ THIS RULE?**

Because this rule seeks to exempt low-risk hazardous waste, it has broad applicability. This rule should be read by:

- Environmental coordinators who may be responsible for notifying regulators and the public regarding waste exemptions; for maintaining records relative to excluded waste; for ensuring waste analysis plans are prepared and implemented; for arranging for waste disposal contracts; and for executing tracking documents for shipments to landfills.
- Chemists that can provide input into sampling and analysis requirements for demonstrating attainment of exemption levels. EPA requests comments on numerous issues including: (1) Should a minimum number of samples be required for each sampling event? (2) Should a strict maximum standard be used such that no sample is allowed to exceed the HWIR exemption level? (3) Should the bias introduced by partial recoveries of chemicals be corrected in order to make results from different analytical methods more comparable? (4) If correction of the bias introduced by partial recoveries is required, should analytical protocols be required to achieve a minimum of 20% recovery and should analytical results with analytic spike recovery of less than 100% be corrected for the percent recovery determined for that sample before being compared to the HWIR exemption level? (5) When the detection limit is higher than the exemption level but still within an acceptable level or risk, should the detection limit be used in place of the HWIR exemption level? (6) Should use of composite samples be considered in addition to grab samples in evaluating a waste for HWIR compliance? Etc.
- Risk assessors who may be able to assist EPA in resolving technical difficulties encountered in developing chemical specific exemption levels from the model discussed within this rulemaking.
- Program managers overseeing projects involving treatment or disposal of listed waste which may be proposed for exemption.
- Treatment facility operators and landfill operators that may manage exempt waste.

**SUMMARY OF THE HWIR EXEMPTION**

Two exemption approaches are under consideration.

- (1) The "generic" exemption. This would establish exemption levels on a chemical-specific basis that once attained, would exempt the waste from 40 CFR 262-266 and 270. In other words, applicable land disposal restriction (LDR) treatment standards would still apply, but hazardous waste generator, storage, and disposal requirements would not. Once LDRs have been satisfied, there would be no restriction on disposal other than those imposed by the State for non-hazardous waste.

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(2) The "landfill-only" exemption. This would establish different numerical levels than the "generic" exemption. Waste attaining these levels are exempt from hazardous waste disposal requirements, but must be disposed in a landfill. The waste would be tracked from the point of generation to the landfill and could not be placed on the land prior to disposal.

Conditions for the generic exemption:

- The waste must meet the HWIR exemption levels.
- The waste must be tested and periodically retested to document the exemption levels have been attained and are maintained for chemicals reasonably expected to be in the waste.
- The overseeing agency must be formally notified that the exemption is being claimed.

Conditions for the landfill-only exemption are the same as for the generic exemption, but in addition the waste must arrive at the landfill within 60 days of shipment. Failure to do so would cause the waste to lose its exempt status.

For either exemption option, the following would be required:

- A waste sampling and analysis plan must be developed.
- Chemicals of concern reasonably expected to be in the waste (CREWs) must be identified. CREWs include (1) chemicals identified as the basis for listing the waste, (2) chemicals listed in the corresponding LDR treatment standard, (3) chemicals detected in any previous analysis, (4) chemicals introduced into the process that generates the waste, and (5) chemicals known to result from side reactions or byproducts of the process that generates the waste. If any of the CREWs do not have an established exemption level, the waste could not be exempt.
- The concentrations of the CREWs must be at or below the established exemption levels.
- The waste must not exhibit any hazardous waste characteristic. In other words, it can not be ignitable, corrosive, reactive, or exceed toxicity characteristic leaching procedures (TCLP) regulatory threshold values.

### **Demonstration of Compliance with the HWIR Exemption Levels**

EPA seeks comments on the following approach for demonstrating exemption levels have been attained:

- The waste must be sampled and analyzed to ensure levels are below the exemptions levels and are not characteristic.
- The analysis must statistically represent concentrations in the waste stream in terms of averages and variation, and at least four samples must be analyzed.
- If any sample exceeds an exemption level, the waste is ineligible for exclusion. However, EPA is requesting comments on alternative approaches.
- The analysis must be capable of detecting the presence of the chemical at or below the specified exemption level.
- Analytical protocols must achieve a 20% recovery.

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- Analytical results with analytical spike recovery of less than 100% must be corrected for the percent recovery determined for that waste before being compared to the HWIR exemption level.
- Waste must be retested periodically.

### **Notification Requirements**

The HWIR exemption, whether "generic" or "landfill-only", will be self-implementing. As such, waste can be exempt without prior review or approval by regulators. However, the overseeing agency does retain an enforcement function against improperly claimed exemptions and needs to know when exemptions are being claimed. Therefore as a condition of the HWIR exemption, notification to the overseeing agency is required.

The notification package must include the following:

- the name, address and RCRA ID number of the facility claiming the exemption;
- the waste code of the exempted waste and narrative description of listed waste;
- a general description of the process that produces the waste;
- the estimated monthly average and maximum monthly and annual quantities of exempted waste;
- a statement that the exemption is being claimed; and
- a certification that the information is true, accurate, and complete.

The exemption would not take effect until written confirmation is received regarding delivery of the notification package to the overseeing agency.

### **Tracking Exempt Waste**

For the generic option, EPA does not believe that tracking is required. However, they solicit comments regarding whether tracking should be used to notify the receiving facility of exempt waste.

For the landfill-only option, tracking is required to ensure waste is disposed in a landfill. Comments are requested on three approaches.

- Direct notification to the landfill . The notice would provide the date of shipment, carrier used, destination facility, volume and general description of the waste. This approach would not require the notice to accompany the shipment, but the landfill operator would have to certify that the waste arrived.
- Use of a revised uniform hazardous waste manifest. The uniform hazardous waste manifest is currently under revision and may be able to be used to track non-hazardous waste.
- Use of Department of Transportation shipping papers. The transporter would be required to return a copy of the shipping paper to the shipper noting the disposal facility and/or subsequent transporters.

### **Recordkeeping**

EPA is considering requiring the following records to be maintained:

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- the waste sampling and analysis plan;
- the results of waste sampling and analysis including quality control analyses;
- all volume determinations used to decide the frequency of retesting;
- a copy of the notification package and all subsequent notifications;
- documentation relied upon in making process knowledge determinations; such as material safety data sheets, product labels, etc.;
- documentation of compliance with LDRs; and
- for the landfill-only alternative, the notification that the waste was shipped to a landfill and certification that the waste was received.

**The HWIR Risk Assessment**

The risk assessment developed for the HWIR exemption is an integrated, multimedia, multipathway, and multireceptor risk assessment that evaluates impacts to human and ecological receptors. The reader is referred to sections XV through XIX for details of the approach. EPA is not proposing exemption levels at this time based on the current model because of inconsistencies which demonstrate the model is not performing as designed.

**Land Disposal Restrictions**

The intent of establishing LDR treatment standards was to substantially diminish the toxicity of the waste or substantially reduce the likelihood of migration of hazardous constituents. It was not intended to treat hazardous chemicals beyond the point of presenting a significant risk. Therefore, the HWIR risk assessment may ultimately result in changes to LDR treatment standards.

If waste meets the LDR levels, but not the HWIR exemption levels, then LDR requirements would be satisfied, but the waste would remain hazardous. On the other hand, if HWIR exemption levels are established below LDR numeric treatment standards, EPA may revise LDR treatment standards accordingly.

**CONCLUSION**

The reader is directed to section XXVI of the proposal for a comprehensive list of 89 issues for which EPA is specifically requesting comments. In addition, EPA invites comments on all relative aspects of this rulemaking including new approaches not yet considered.